Upward Mobility and Authoritarian Stability: Merit-Based Elite Recruitment in China

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ABSTRACT

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Why does merit-based elite recruitment exist under authoritarianism, notwithstanding its adverse impact on elites' private interests? In my dissertation, I develop an argument that centers on the role of upward mobility in authoritarian regime dynamics. I argue that merit-based elite recruitment provides individuals from non-elite background an opportunity to move into the ruling class by effort; it enhances their perception of upward mobility and thus reduces their discontent with the status quo. An authoritarian ruler, therefore, may deliberately adopt and institutionalize meritocracy in elite recruitment to engineer limited but sustained upward mobility, which co-opts large numbers of non-elites and helps stabilize the regime.

Focusing on the case of China and its national civil service examination (NCSE), I draw on qualitative, quantitative, and experimental evidence to triangulate the complex dynamic between the CCP leadership, local officials, and ordinary citizens in merit-based elite recruitment. I employ two survey experiments to demonstrate that, by imposing institutional constraints on local officials, the CCP leadership can make its commitment to merit-based recruitment credible and enforceable. Analyzing data from two national representative surveys, I find that the institutionalization of NCSE forges a widespread and persistent perception of upward mobility among citizens eligible for the exam and weakens their pressure on the regime for income redistribution; it also strengthens public support for local government and contributes to the legitimacy of the CCP regime. These findings contribute to our understanding of the effects of meritocracy under authoritarianism and highlight the importance of upward mobility in relation to regime resilience.

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Acknowledgments

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To my parents:

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Chapter 1

Introduction

> "At any moment a servant may become a master, and he aspires to rise to that condition; the servant is therefore not a different man from the master... [p]ublic opinion, founded upon the usual order of things, draws them to a common level and creates a species of *imaginary equality* between them, in spite of the *real inequality* of their conditions."[1]
>
> – Alexis de Tocqueville, *Democracy in America*

Zhao Qian was a college graduate who studied law in a second-tier university in Sichuan Province in China. Coming from a humble family in another province, she faced a tough career prospect upon graduation despite her academic credential and the Chinese Communist Party (CCP) membership. As luck would have it, the provincial government of Sichuan adopted a system of open exam to recruit new civil servants that year. Qian took advantage of the opportunity and placed first in both the written test and the interview. She was subsequently offered a position in the provincial Department of Justice and became a government official. Without the exam, she told a reporter, working in the government would have been

[1] Italicization emphasis added by author.

"something beyond my wildest imagination."[2]

Qian is among the tens of millions of college-educated youths in China today who apply and compete for government jobs based on their effort and merit. The National Civil Service Examination (NCSE), introduced in the late 1990s, has standardized and institutionalized entry-level elite recruitment in China. It provides an open platform for citizens to compete for government positions based on their ability and skills; family background and personal ties to the regime *alone* no longer have decisive influence on recruitment.

Why does merit-based elite recruitment exist under authoritarianism? This is the central question my dissertation seeks to answer. I argue that it serves a vital political function of providing regular, albeit limited, opportunities for ordinary citizens to join the ruling class. As a result, it cultivates among them what Tocqueville calls "imaginary equality" (1835, Book III Chapter 5), despite entrenched elite privileges and inequality in the regime. Upward mobility, which is well-known for its effect of "stabilization of the democratic order" (Lipset 1992), plays a similar role in authoritarian political order. Its stabilizing effect can be garnered with an institution of merit-based elite recruitment to strengthen regime survival.

1. Upward Mobility and Authoritarian Regime Dynamic

How do authoritarian regimes maintain survival? Most existing studies on regime dynamics focus on the inherent tension between the ruling elites and the masses that stems primarily from the socioeconomic disparity (e.g., Acemoglu and Robinson 2001, 2005; Boix 2003). They argue that this tension can be managed by redistributing some of the income from the elites to the masses, as improvement of socioeconomic wellbeing for the masses helps reduce their discontent and hostility towards the elites. Economic redistribution, along with repression, therefore, is a mainstay in autocrats' toolbox to control the masses and thereby stabilize the regime (Wintrobe 1998).

[2]Southern Weekly. August 28, 2003. "The Ten-Year Journey of the Chinese Civil Service" (*zhongguo gongwuyuan shinian fengyu lu*).

While these studies provide valuable insights to the question of authoritarian survival, the general framework seems to be largely predicated on an implicit but important assumption: that there is little to no individual mobility between the elites and the masses. More often than not, these two groups are treated as distinct without permeability between them; an individual's membership to either group is assumed to be fixed, which determines his socioeconomic status and, in turn, preference for redistribution. In other words, an individual's attitude towards the regime is solely a function of his class membership that is not expected to change. Under this framework, redistribution from the elites to the masses is necessary to buy off (at least some members of) the masses to maintain regime stability.

In reality, as an authoritarian regime persists over time, the elites inevitably face the issue of class renewal and succession. This issue is particularly relevant for the more institutionalized regimes where the dictator has a longer time horizon and takes an interest in economic development, i.e., a "stationary bandit" (Olson 1993). While elites in these regimes do concern themselves with preserving privileges and reaping personal gains, they also pay attention to effective governance. Consequently, when recruiting new members into the ruling class, elites value not only candidates' personal ties and loyalty to the regime, but also their skills and ability necessary for governing.

Assuming that the distribution of talent is uniform across the population, merit-based selection would allow some members of the masses to be recruited into the elite class. As a result, there is a certain degree of upward mobility; i.e., it is possible for an individual to move up from one class to the other in an authoritarian regime.

This *upward mobility*, defined as movement of individuals from the masses into the elite class, has profound political implications for an authoritarian regime. Not only does it co-opt a few with elite privileges and benefits, it shapes the belief held by the rest of the masses regarding their future prospect. Since individual preference for redistribution is not only determined by current socioeconomic conditions but also influenced by other factors

including culture, value, and belief (e.g., Alesina, Glaeser and Sacerdote 2001; Iversen and Soskice 2001), the upward mobility generated by elite recruitment can alter at least some people's demand for redistribution, hence having an impact on regime stability.

In the economics literature, it is argued that a higher degree of upward mobility has a dampening effect people's preference for redistribution. Hirschman and Rothschild (1973) propose a theory of "tunnel effect", where a poor individual draws gratification from the advance made by other members of his class and becomes more optimistic about his own future. Piketty (1995) attributes the persistent difference in individuals' distributive preference to their past experience with mobility. More recently, Benabou and Ok (2001) propose a hypothesis of "prospect of upward mobility (POUM)", where distributive preference is formed partly based on expected future income; if an individual expects to earn a higher income in the future, he would prefer less redistribution even at the present. Empirical evidence shows when people believe that they can improve their socioeconomic conditions by individual effort, they are less in favor of redistribution (Alesina and La Ferrara 2005; Alesina and Angeletos 2005).

A sustained degree of upward mobility, therefore, can be used by the dictator to moderate popular pressure for redistribution, which, if unmet, could lead to mass revolt. By allowing a small number of ordinary citizens to join the elite class based on merit, the dictator not only attracts talents to boost state capacity, but – more importantly – cultivates a belief among the masses that they have a chance to become elites themselves. Once a perception of upward mobility is formed, the dictator faces a reduced level of revolutionary threat, even without expanding redistribution.

The focus of my dissertation is upward mobility under authoritarianism, which has been largely missing from the analysis of regime dynamic. Using the case of contemporary China, I argue that the dictator can harness upward mobility to his advantage and use it as an instrument to achieve regime survival.

2. *Theory: Institutionalized Meritocracy*

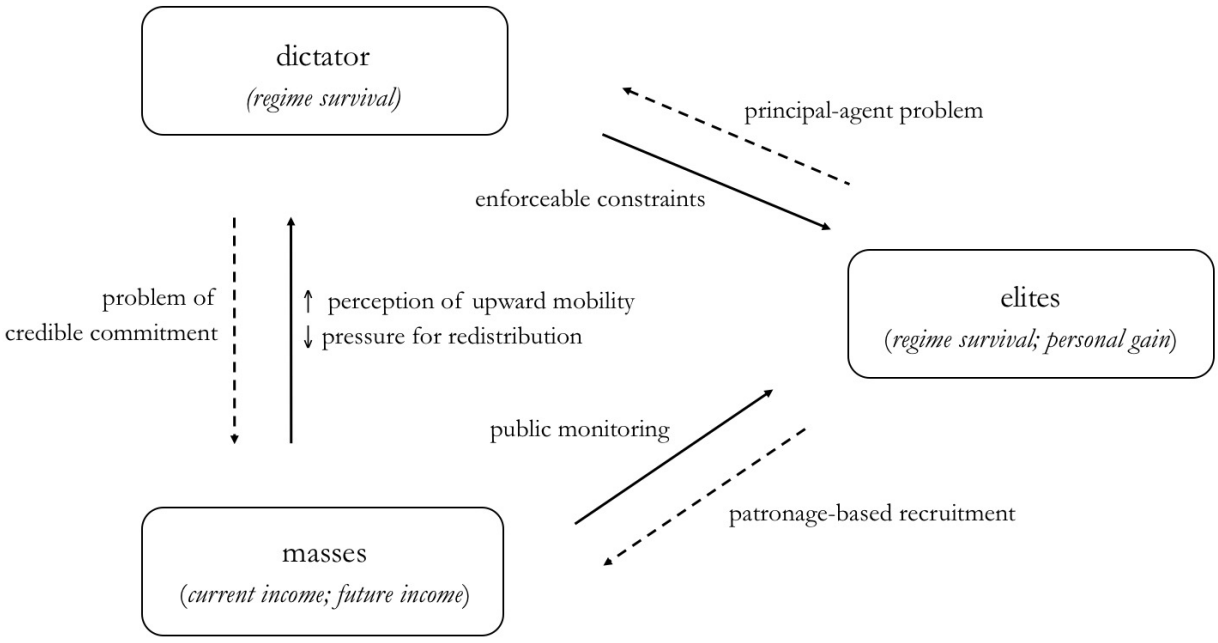
In an authoritarian regime without upward mobility, the only way for members of the masses to improve socioeconomic conditions is by collective action, either in the form of collective bargaining to obtain a larger income transfer or in the form of revolution to overthrow the regime. In contrast, when there exists some upward mobility, individuals have an alternative: they can pursue individual advancement with their own effort rather than counting on collective action, the success of which can be uncertain. By regularly recruiting a small number of ordinary citizens into the elite class based on merit, therefore, the dictator can effectively weaken the appeal of collective action and stabilize the regime without expanding redistribution.

For this arrangement to work, however, the dictator must address two issues. The first is a problem of credible commitment: the masses' belief that they have an opportunity to work their way up is conditioned upon the promise of *sustained* upward mobility, but how can they be sure that the unconstrained dictator will not renege on this promise at any time? The second, which can further compound the first, is a principal-agent problem, when the dictator delegates the task of recruitment to his subordinates in the elite class, who have divergent preference from the dictator and are prone to using recruitment as patronage. If recruitment cannot reliably select candidates based on merit, it will not be viewed by the masses as a viable channel of upward mobility.

I argue that, through *institutionalization*, the dictator can resolve these problems. By setting up a set of clear, enforceable rules that bind himself and the elites, the dictator can create an equilibrium where merit-based upward mobility is sustained.

The argument is illustrated in Figure 1.1. The three (groups of) actors – the dictator, the elites in the ruling coalition, and the masses – are represented in three boxes. Under the name of each, in the parentheses, are the parameters of his utility function: the dictator

Figure 1.1: Summary: Institutionalizing Merit-Based Elite Recruitment



is solely interested in regime survival (which encompasses both material gains and power itself); the elites are interested in regime survival (from which they derive material gains) as well as personal gains from rent-seeking; and the masses evaluate their utility based on both current income and expected future income.

Non-Institutionalized Merit-Based Elite Recruitment

The dashed lines in the diagram represent the dynamic and interactions between actors when merit-based recruitment is *not* institutionalized. The dictator suffers from a principal-agent problem when delegating recruitment to the elites, who prefer to use recruitment as patronage (i.e., handing out government jobs for personal gain). As a result, the dictator is not able to maintain merit-based upward mobility, and the public does not expect to earn a higher future income or change their preference for redistribution.

Institutionalized Merit-Based Elite Recruitment

The solid lines in the diagram represent the dynamic and interactions between actors when merit-based recruitment is institutionalized. This can be achieved by setting up a set of clear, enforceable rules that constrain both the elites and the dictator.

The primary function of the rules is to eliminate or reduce patronage-based recruitment by elites. To do so, the dictator introduces institutional features that prevent undesirable information flow between elites and candidates, so that the elites in charge of recruitment cannot identify candidates who are suited for patron-client relationships. Also, by making the merit-based rules public, the dictator invites the masses to monitor the recruitment process; elites who still engage in patronage-based recruitment, once detected and reported by the public, face punishment from the dictator.

Once merit-based recruitment can be reliably enforced, it helps forge a public perception of upward mobility, which reduces their demand for redistribution. While these outcomes have a stabilizing effect on the regime, they also imply that, if the upward mobility is suddenly abolished, it would drastically change individuals' expectation of future income and could trigger large-scale revolt.[3] This revolutionary threat deters the dictator from tampering with merit-based elite recruitment, hence credibly committing him to upholding the system. Through institutionalization, all three actors are better off playing by the rules of merit-based recruitment, thereby making it an equilibrium.

Theory Summary

To summarize, my core argument is as follows. By committing to a set of clear, enforceable rules that reduce patronage practice by elites, the dictator is able to institutionalize

[3]Indeed, this is exactly what happened when the the imperial court of China in the Qing Dynasty abolished the imperial examination (*keju*) in 1905, which had served for centuries as a gateway for commoners to leapfrog into the ruling gentry class. The sudden change in future prospect for the hopeful candidates prompted a large number of them to join rebellion, which culminated in the 1911 Revolution that overthrew the regime (Bai and Jia 2016).

merit-based elite recruitment, which forges a *widespread and persistent* perception of upward mobility among ordinary citizens and thereby dampens their redistribution preference. The enhanced prospect of upward mobility and reduced pressure for redistribution thus help stabilize the authoritarian regime.

Of course, the institution of merit-based elite recruitment largely benefits those with *merits*; individuals who have little education or skills would not see their upward mobility change much. This scope condition, however, should not diminish the argument. In many ways, educated non-elites exhibit greater "destabilizing behavior" if they are "unemployed, alienated, or otherwise dissatisfied" (Huntington 1968, 68); it is imperative, therefore, that the regime co-opt them to avoid potential opposition.

In the next section, I briefly describe the case of China, where the National Civil Service Examination (NCSE), an institution of merit-based elite recruitment, was introduced two decades ago. I argue that this institution has significantly enhanced many people's upward mobility prospect– even if they do not realize it eventually – and made them more tolerant of the current regime even in the face of entrenched elite privileges and growing inequality.

3. Civil Service Reform

The Chinese Case

The authoritarian rule of the Chinese Communist Party (CCP) in modern China bears many hallmarks of authoritarianism. The ruling party is almost single-mindedly focused on maintaining – and continuing to amass – its political power, and it manages its tenuous relationship with the masses with a mix of strategies ranging from outright repression to subtle co-optation. One thing that sets the CCP regime apart from other authoritarian regimes, however, is the organizational prowess of the ruling party, which in turn manifests itself as a high degree of state capacity. Throughout the different periods of the CCP rule,

although its central task has not always remained the same (i.e., from making revolutions to economic development), the party has always, till this day, placed paramount importance on elite management. The guiding principle for CCP personnel management, "The party manages cadres,"[4] combined with the Stalinist slogan, "cadres decide everything," reflects the reality that, for CCP, elite management is the key to achieving any of its goals.

One important aspect of elite management is elite recruitment. What type(s) of individuals are recruited into the ruling elite class has direct consequences for government performance. Prior to the personnel reform in the 1980s, elite recruitment in China used to be done via a system called "job placement," where the party *unilaterally* identified individuals who were deemed qualified – often based on recommendations made by universities and work units or through personal connections – and recruited them based on internal evaluation. As efficient and effective as it might have been, the job assignment system did not allow an open labor market for individuals to freely apply or compete for government positions. Most individuals, qualified or not, were shut out from the political elite class as they never had a chance to be considered in the first place. As a result, even though the recruitment system did select individuals from humble background and allowed them to rise socioeconomically, most Chinese citizens did not perceive there to be much upward mobility vis-à-vis the political elite class.

The situation started to change with the personnel reform in the 1980s, the main goal of which was to replace old revolutionary cadres with younger cadres with technical expertise. In particular, elite recruitment underwent a transformation in the 1990s, as the central government introduced the National Civil Service Examination (NCSE) as the standardized and mandatory recruitment method for all entry-level civil servants.[5] Under the new system,

[4]This is a literal translation of *"dang guan ganbu"*, which means that the Party is directly in charge of cadre management.

[5]The term "civil servant" entered the Chinese political nomenclature in the late 1980s as a synonym for "cadre," but with a connotation of professionalism. It refers to a subset of government employees who form the political elite class. A more detailed discussion is provided in Chapter 2.

all college-educated citizens between the age of 18 and 35 are eligible to take the exam, and all entry-level positions in government must be filled with the new recruitment method. From the outset, the central government laid out the guiding principles for NCSE, which were "open, fair, competitive, and meritocratic."

Following the introduction of NCSE, the central government has since enacted the *Civil Service Law* and a series of supporting legal documents to govern its implementation. Since local elites are the ones making final recruitment decisions, many of these measures are designed to reign in their penchant for patronage and push them to adhere to the merit-based mechanisms. Over time, as NCSE has become more institutionalized in its selection process, it has also become extremely popular with the general public. Each year, several million college-educated youths flock to take the exam to join the government, even though the odds of getting a spot is often less than 1 in 50. The steep competition, however, does not deter or discourage applicants, as many continue to take the exam repeatedly, convinced that they can succeed as long as they put in the due effort. The sustained popularity of NCSE reflects a belief held by many college-educated youths today, which is that NCSE as a viable channel of upward mobility. Being able to take advantage of NCSE, they are more optimistic about their future prospect and thus less discontented with the regime.

A Comparative Perspective

The Chinese experience of adopting a system of civil service is by no means unique. In order to modernize the government, many countries in the world had moved from a patronage-based bureaucracy to a rational one, governed by politically neutral selection criteria based on merit. However, scholars have proposed different explanations for civil service reform.

One of the explanation, in a democratic context, concerns with the electoral chances of the incumbent party. Observing the adoption of civil service systems by individual states in the U.S., Ting et al. (2012) argue that, while political parties favor a patronage system

where they, when in power, can hand out government jobs in a targeted fashion in order to strengthen their political influence, they do not want their rivals to do the same when they are out of office. As a result, an incumbent party expecting to lose the upcoming election is more likely to enact a civil service reform, so that its successor cannot benefit from the old patronage system.

A similar story can be found in the developing world. Geddes (1994) explained how, and why, Latin American countries sometimes succeeded in building bureaucratic capacity but other times not. She contends that political leaders, acting as political entrepreneurs, only enact reforms when it serves their own interests, as determined by political institutions and circumstances. In other words, a leader would *not* bring about reforms such as meritocratic recruitment if it hurts his or her political survival.

These two views, while highly informative on the motivation of political actors, do not lend themselves readily to explain the Chinese case, where the CCP enjoys a rather secure monopoly on political power. If there is no immediate threat to CCP's political threat, why did it decide to reform the civil service towards more meritocracy, especially in terms of recruitment?

A different explanation for the adoption of merit-based civil service is rooted in an efficiency argument. In a cross-national analysis, Rauch and Evans (2000) find that merit-based recruitment is an important determinant of state capacity, in terms of both bureaucratic performance and corruption control. This observed outcome is further expounded by Hollyer (2010), where he associate the adoption of merit-based civil service recruitment with structural socioeconomic changes. It is argued that, when the level of skills or education rises significantly amongst the politically unconnected, the government incurs a great opportunity cost by adhering to a patronage-based system. In other words, merit-based recruitment allows the government to tap into a larger pool of talent when politically connected candidates are not always qualified. The experience of Prussia in the 19th century is a case in point.

Since Prussian nobility overwhelmingly focused on cultivating their military credentials in the 18th century, and most university degree recipients were members of the bourgeoisie, it became very difficult to find qualified noblemen to fill higher civil service positions (Mueller 1984). As a result, merit-based exams were introduced under Federick II to bolster bureaucratic capacity, leading to the recruitment of university-educated civil servants, many of them from the non-noble classes.

The argument I make in this dissertation is similar to Hollyer (2010), in that I also focus on the politically unconnected in a regime. Different from Hollyer (2010), however, I pay more attention to their perceived upward mobility under each recruitment system (i.e., patronage versus meritocracy) instead of their strategy for getting into the government. In fact, even in the Prussian case, it was noted that "...during the early nineteenth century the [Prussian] bureaucracy provided a carefully regulated opportunity for upward mobility through entrance to its ranks" (Gillis 1971, 29). Consequently, I am primarily concerned with the stability of the regime as a result of individual perception of upward mobility rather than the regime's economic performance, even though the latter also contributes to the former. In fact,

4. Research Design: An Outline

To support my argument of institutionalized upward mobility and regime stability, I focus on the Chinese case and NCSE. I draw on an array of qualitative, quantitative, and experimental evidence, gathered during my year-long fieldwork in China, including 45 in-depth interviews with government officials, scholars, and NCSE experts; archival research of government documents at both central and local levels; an original national representative survey on public support for NCSE; two original survey experiments conducted exclusively among government officials; and two existing surveys. Together, these sources allow me to triangulate on the complex dynamic of merit-based elite recruitment among different players.

The rest of the dissertation is organized in the following way. Based on the theory laid out above, Chapters 3-6 are devoted to empirically testing the key observable implications derived from the theory, as summarized in Table 1.1.

Table 1.1: Observable Implications and Empirical Tests

	Observable Implication	Chapter	Empirical Evidence
a.	When unconstrained, local elites exhibit patronage-based behavior in recruitment.	3	Conjoint experiment conducted among over 300 government officials.
b.	By imposing institutional constraints, NCSE reduces patronage practice and promotes merit-based recruitment.	4	List experiment conducted among over 1600 government officials.
c.	NCSE enhances individual perception of upward mobility and weakens preference for redistribution.	5	Analysis of data from Chinese General Social Survey (sample size 4,500+).
d.	NCSE is perceived as a viable channel of upward mobility by eligible citizens.	5	Analysis of data from Beijing College Panel Survey (sample size 4,700+).
e.	NCSE receives widespread public support as it is perceived as a viable channel of upward mobility.	6	Analysis of an original national survey (sample size 4,100+).

Chapters 4 and 5 focus on the dynamic between the CCP leadership and local officials in the implementation of NCSE. In order to understand how meritocracy is enforced, in Chapter 3, I first conduct an analysis of local elites' multidimensional preference for candidates during recruitment, i.e., implication (a). Employing an original conjoint experiment, I estimate the relative importance of candidate attributes such as competence, loyalty to the regime, and personal connections to political insiders. I show that, when provided with relevant information, government officials pay close attention and respond positively to candidates' political connections, even though they do not regard these connections as informational cues for candidates' competence or ideological loyalty. At the same time, government officials do value candidates' competence and loyalty, suggesting that they are meritocratically minded as

long as candidates' political connections do not come into play. These findings indicate that, without proper institutional constraints that filter out information on candidates' political connections, local officials are likely to engage in patronage-based recruitment.

In Chapter 4, I examine the effectiveness of institutional constraints in NCSE that have been put in place over time to regulate incumbent elites' behavior during recruitment. Taking advantage of a national survey of over 1600 government officials, I implemented a list experiment to estimate the importance of candidates' political connections during NCSE recruitment. More importantly, I examine if institutional constraints in NCSE reduces the influence of candidates' political connections, i.e., implication (b). I find that government officials who entered the government via NCSE themselves are significantly less likely to consider candidates' political connections as a key criterion for recruitment, indicating that their personal experience with institutional rules in NCSE makes them less likely to engage in patronage practice. By imposing necessary institutional constraints on local elites, therefore, NCSE can effectively reduce their patronage-based practice and create a more level playing field for all. This, in turn, promotes upward mobility, especially for those who do not have prior connections with political elites.

Chapters 5 and 6 shift focus from inside the ruling class to the effect of NCSE as an institutionalized system of merit-based elite recruitment on the Chinese society at large. In Chapter 5, I explore the dynamic between the regime and its college-educated youths, a large and continually growing group. Specifically, I examine if NCSE has any effect on their perception of upward mobility and attitude towards redistribution. To test implication (c), I employ a difference-in-differences design to analyze data from the Chinese General Social Survey(CGSS), a multi-year national representative survey. Taking advantage of the staggered implementation date of NCSE across different provinces, I leverage the province-cohort variation to estimate the effect of NCSE introduction on college-educated youths' perception of upward mobility and their distributive preference. I find that, compared to those who

could not participate in NCSE due to an arbitrary age requirement, those who could report significantly higher perceived upward mobility, both in retrospect and in prospect; they also exhibit weaker preference for income redistribution.

To explore the causal mechanism through which NCSE affects individual perception and attitude, in Chapter 5, I also test implication (d), using data from the Beijing College Panel Survey, a probability sample survey of college students in Beijing. I find that students from provinces where NCSE has been introduced for longer and thus has a more robust implementation are more likely to choose civil service as their future career. It indicates that merit-based recruitment leads more college-educated youths to believe that they have a reasonable chance of joining the ruling elite class and regard NCSE as a viable channel of upward mobility.

Last but not least, Chapter 6 examines how the general public feels about NCSE and whether the level of support varies across different groups. With the aid of an original national representative survey conducted in 2014, I find that overall there is a very high level of support for NCSE among Chinese citizens. In particular, provinces with longer history of NCSE implementation report higher support, indicating that public approval for NCSE increases as the merit-based elite recruitment system continues to institutionalize. On the individual level, successful experience with NCSE increases support for the exam; at the same time, failed experience with NCSE does *not* diminish support, suggesting that the selection process in NCSE is largely transparent and even-handed such that failed applicants do not become embittered or disillusioned with the exam. Furthermore, I find that NCSE contributes to citizens' support for the local government and the political system in general. It can be inferred that NCSE has become a source of legitimacy for the CCP regime.

Combined, these empirical tests provide evidence that the institution of NCSE is effective in constraining local government officials and promoting meritocracy in elite recruitment; as a result, it enhances the perception of upward mobility for college-educated youths and reduces

their demand for redistribution. As they become more contented (or less discontented) with the status quo, regime stability is strengthened.

5. Contribution

By studying in depth the merit-based elite recruitment institution in contemporary China that is the NCSE, I highlight the role of social mobility in understanding regime dynamic. The importance of upward mobility is better understood in the context of democracy. Going as far back as Alexis De Tocqueville (1835), observers of democracies have long noted the stabilizing effect of social mobility on the political system (e.g., Lipset and Bendix 1959; Blau and Duncan 1967; Erikson and Goldthorpe 1992). In comparison, although upward mobility under authoritarianism is often examined and its causes probed, its study has not been systematically integrated into the theoretical inquiry of regime survival. Does upward mobility – and in what ways – contribute to authoritarian resilience? My study hopes to provide some answer on this question.

Based on the case of China, I seek to make a broadly comparative argument on how authoritarian rulers can use merit-based elite recruitment as a survival strategy. Existing literature on this topic focuses primarily on its impact on state capacity: Johnson (1982) discusses its importance for the developmental state model; Evans and Rauch (1999; 2000) point to its advantage in promoting economic growth. While I do not challenge their argument, I point to another function of merit-based elite recruitment, which is that it cultivates a perception of upward mobility among non-elites and thereby reduces their discontent with the regime. In a way, the non-elites are bought off by the regime with a promise that they have a fair chance of moving upward, except that the regime does not pay them anything in exchange for their support or acquiescence. Merit-based elite recruitment, therefore, functions as a co-optation device, which is a common strategy used by authoritarian rulers (Bueno de Mesquita et al. 2003; Haber 2006; Magaloni 2006).

In examining merit-based elite recruitment, my focus on its institutionalization also contributes to a growing literature on how authoritarian rulers resort to institutions, which help solve problems such as incredible commitment and information asymmetry, to strengthen regime survival (Haber 2006; Gandhi 2008; Malesky and Schuler 2010; Svolik 2012; Boix and Svolik 2013; Truex 2016). By imposing institutional constraints on the elites and on himself, the authoritarian ruler can better preserve the system of merit-based recruitment, which enhances regime resilience in several ways.

Lastly, NCSE, as an institution that looms large in millions of Chinese youths' lives and serves as a bridge between them and the ruling regime, remains woefully understudied. By comprehensively examining its institutional evolution and exploring the dynamic between different actors, I hope to make a substantive contribution to the understanding of an important aspect of political life in China today.

Chapter 2

Civil Service Exam in Contemporary China

Civil service exam is not a novel idea in China. For more than a millennium, the imperial courts of several dynasties had adopted a standardized examination to recruit talents to serve in the government. This tradition, coupled with the Confucius teaching that the ultimate purpose of learning and scholarship is to serve one's country as a government official, has perpetuated a belief, or even a myth, that anyone with the right qualification and talent can enter the political elite class if he stands out from the merit-based competition. The Chinese folklore is full of stories of individuals from humble beginnings who succeeded in the exam, sometimes after repeated tries.

The contemporary civil service exam in the Poeple's Republic of China, introduced in the 1990s, shares many similarities with the old practice, but it also differs in important ways. To fully understand the inner workings of the civil service exam today and grasp its political implications, it is imperative to understand the civil service, especially in the context of an authoritarian Leninist party-state.

This chapter provides a comprehensive description of the civil service, focusing on issues such as how the civil service came to be under the CCP leadership, who constitutes the civil service, and why it enjoys the elite status vis-à-vis the rest of the society. The latter part of

this chapter focuses on the exam itself, providing readers with an understanding of how the exam is administered, its format and content, as well as the public response to it.

1. History of Elite Recruitment in China

Keju: A Tradition of Meritocracy in Imperial China

China has a long history of meritocratic elite recruitment, the inception of which dates back to Emperor Yang in the Sui Dynasty (A.D. 605). The imperial examination, more commonly known as *keju*, was a comprehensive and elaborate system that recruited new ruling elites for the imperial court by testing candidates on their mastery of classical canon in Chinese literature and philosophy. Unlike most of its contemporaries, China's reliance on *keju* to fill public office meant that entrance to the ruling elite was on a competitive basis and there was little to no hereditary ruling aristocracy (apart from the emperor himself).

For centuries, before its abolition in 1905, *keju* had served as a gateway for commoners to leapfrog into the ruling elite class. In contrast to patronage-based elite recruitment, *keju* did not discriminate candidates based on kinship ties or personal connections; instead, it opened up the opportunity to all who were capable and desirous to enter the scholar-official ruling class. Although an individual's success in *keju* partly depended on his access to education,[1] which in turn was closely correlated with his socioeconomic class, the exam nonetheless provided a valuable channel of upward mobility for those from non-elite family background, especially in places where commoners enjoyed relatively easy access to literary knowledge and education, thanks to the advent of printing technology. Historians agree that *keju* helped transform the Tang Dynasty (A.D. 618-907) from a military aristocracy to a centralized government with a scholar gentry class, as it staffed the bureaucracy with an increasing number of new elites with no prior connections with the aristocratic clans and thus

[1]Only men were allowed to participate in the exam and in politics, hence the masculine pronoun.

weakened the power of the aristocrats. Similarly, the upward mobility provided by *keju* in the Ming Dynasty is well-documented by Ho (1964), who shows that the proportion of *jinshi*, or advanced scholars who had successfully passed the highest level of the imperial exam, from families with no record of degree-holding of any kind in the past three generations was consistently high, averaging over 40 percent throughout the fifteen and sixteenth centuries. Although not a majority, it is impressive that individuals from humble background were at all able to enter the ruling elite at the highest level. When comparing China to Europe, Max Weber is said to have observed that, "strangers of unknown rank would be asked how many examinations they had passed, not (as in Europe) how many ancestors of what social type they had" (Woodside 2006).

Perhaps even more important than the *actual* upward mobility provided by the exam – indeed, it tended to wax and wane both within and across different dynasties – is how it had successfully created a long-lasting and widespread *perception* of upward mobility among the Chinese population. Folk tales abounded to describe how men of humble origins were able to ascend through *keju* by hard work and sheer determination; many devoted their lives to taking the exam repeatedly in hope of eventual success. The perception of upward mobility not only motivated men of great talents to join the ruling elite and hence helped strengthen the state capacity of imperial China, it also served as a source of political stability in a highly unequal society, as many sought socioeconomic betterment by taking advantage of a channel provided by the existing political order rather than by overthrowing it. In fact, when the Qing imperial court abolished *keju* in 1905, it drastically changed the future prospect – actual or perceived – of many hopeful candidates and prompted a large number of them to join the rebellion, which culminated in the 1911 Revolution that overthrew the regime (Bai and Jia 2016).

The legacy of *keju* on contemporary China is profound. For the ruling class, it provides a successful example of a meritocratic system for elite recruitment. For the ruled, it has

forged a culture that places great emphasis on education and reinforced the notion that a meritocratic elite recruitment system would not put non-elites at a disadvantage; on the contrary, most people welcome the open competition and regard it as a viable path to move up the socioeconomic ladder.

Elite Recruitment under CCP

After several decades of revolution and civil strife in the early 20th century, the Chinese Communist Party (CCP) took power in 1949 and began to govern China in earnest. Borrowing from the Soviet example, CCP established a cadre system of parallel Party and state institutions at each level of the government, with the party providing political and policy leadership and the state in charge of implementation. According to Barnett (1967), by the early 1960s, China's cadre management had matured into a powerful, party-dominated system.

CCP's revolutionary path to power profoundly informed its approach to and style of cadre management in the Maoist era. Instead of an open-to-all merit-based recruitment system like the imperial exam, the party relied heavily on class analysis to identify supporters and viable candidates for personnel selection. Specifically, a key criterion for cadre recruitment was whether an individual came from a proletariat background or had demonstrated revolutionary zeal. To the extent that this class/ideological consideration dominated decision-making, other factors such as competence or technical expertise had to give way and played only secondary roles. Although the official slogan for cadre evaluation was "red and expert" (*you hong you zhuan*), in practice "red" (i.e. revolutionary credentials) was given significantly more weight than "expert" (i.e. technical knowledge) in determining cadre selections and promotions.

Moreover, during the Maoist era, personnel decisions were made based on cadre dossiers and evaluations, which were "deliberated and conducted in an atmosphere of secrecy" (Man-

ion 1985). The unilateral process by CCP without any input from or interaction with the general population meant that only a small number of individuals who had prior contact with party organizations would be considered for cadre recruitment. The vast majority of Chinese citizens, regardless of their revolutionary zeal or technical expertise, did not have any realistic opportunity to become part of the ruling elite even if they wanted to. In other words, the recruitment system was not open for application or competition.

In the wake of the Cultural Revolution (1966-1976), which had seen an onslaught on the state apparatus and numerous purges of government officials at all levels, the party was left with a shattered cadre system. Under the leadership of Deng Xiaoping, CCP veered away from revolutionary struggle and embarked on economic reform and modernization. The rebuilding of the cadre system, therefore, was designed and carried out in service of the reform. One major problem facing the party was that the existing cadre system was both outmoded in organizational structure and deficient in personnel quality to meet the challenge of economic development. Some aspects of the problem included life tenure without mandatory retirement age for senior leaders and generally low educational level among cadres.

To better serve the goal of economic modernization, the party launched a series of effort to reform its personnel system. At its 12th National Congress in 1982, CCP passed a new party constitution, which spelled out the guidelines for cadre management. With regard to cadre selection, the new constitution stated that the party must observe the principle of "both political integrity and ability" (*decai jianbei*) so as to achieve elite transformation in the direction of a "revolutionary, younger, more knowledgeable, and more professionally competent elite corps" (*ganbu duiwu de geming hua, nianqing hua, zhishi hua, he zhuanye hua*). Song Renqiong, the head of the CCP Central Organization Department at the time, stressed that elite transformation was a long-term policy for the party and the related measures must be institutionalized (*zhidu hua*) over time.[2] In the years following, policies such

[2]People's Daily (*Renmin Ribao*). October 2, 1982. "Build a Cadre System Based on Principles of Revolutionization, Rejuvenation, Learning, and Professionalization." (*Anzhao geming hua nianqing hua zhishi*

as mandatory retirement age and promotion of younger cadres with technocratic education were implemented.

To deepen the personnel reform, CCP focused on establishing a rule-based, rational institution of civil service to replace the old cadre system. In 1987, Party Secretary-General Zhao Ziyang stated at the 13th CCP National Congress that, "[t]he focus of cadre system reform at the moment is to establish an institution of national civil service."[3] Specifically, the newly established civil service would only include the 4.2 million cadres working in government organs; employees of other state sectors such as public institutions (*shiye danwei*) and state-owned enterprises (SOEs) would not be part of the civil service (Burns 1989). As indicated by the figures in Table 2.1, only a small fraction of existing cadres (i.e., less than 15%) went on to become civil servants after the reform.

Table 2.1: Distribution of Cadres in China, 1987

Employment Sector	
Government Departments	4,000,000
Legislative/Judicial Personnel	350,000
Public Institutions	10,800,000
State-Owned Enterprises	10,300,000
Others (Parties, Mass Organizations, etc.)	1,500,000
Total	27,000,000

Note: This table is reproduced from Burns (1989).

In 1993, the central government promulgated the *Provisional Regulations on the National Civil Service*, the first official document to outline the structure and management of the civil service. It laid out the direction for various reform measures. On the issue of recruitment, the Ministry of Personnel followed up by issuing the *Tentative Provisions on National Civil Service Recruitment* in 1994, which served as a guideline to introduce standardized examination as the principal recruitment method. In this document, the central government described the

hua zhuanye hua de fangzhen jianshe hao ganbu duiwu.)

[3]People's Daily (*Renmin Ribao*). November 4, 1987. "Advance along the Road of Socialism with Chinese Characteristics (*Yanzhe you zhongguo tese de shehui zhuyi daolu qianjin.*)

governing principles of recruitment as "open, fair, competitive, and meritocratic" (*gongping, pingdeng, jingzheng, zeyou*).

In the following years, both the central and local governments experimented with using exams to recruit new civil servants. These initial efforts, however, were cautious and limited in scope. As the reform deepened, the CCP leadership decided to expand the scope of civil service exam by calling for its universal adoption in *all* entry-level civil service positions, thus establishing a system of National Civil Service Exam (NCSE). In 1996, *People's Daily*, the official CCP newspaper, introduced and promoted the concept of "all entries via exam" (*fanjin bikao*, 凡进必考) as a central principle for NCSE.[4] Simply put, it declared that all entry-level positions in civil service must be filled via the exam system.

The principle of *fanjin bikao* was first adopted by the central government in 1996. Subsequently, provincial governments heeded the call and adopted this practice in the following decade. Since each provincial government is responsible for administering the civil service exam for all four levels of local government under its jurisdiction (e.g., provincial, municipal, county, and township levels), the introduction of NCSE in each province – marked by the adoption of the *fanjin bikao* principle – meant that a large number of civil service positions suddenly became available for open competition.

After a decade of civil service reform, many new practices – including the NCSE – were enshrined into law when the *Civil Service Law* was enacted in 2006. More than twenty complementary laws and regulations have since been put in place to further institutionalize the management of civil service. In the section on recruitment, the *Civil Service Law* declares that,

> *Article 21.* In the recruitment of entry-level and other non-leadership civil service positions, methods of open examination, close inspection, fair competition, and meritocratic selection must be adopted.

[4]People's Daily (*Renmin Ribao*. June 14, 1996. "Central Government Departments Widely Adopt Exam in Recruitment; 737 Civil Service Positions to be Filled via Exam."

In addition, the State Administration of Civil Service (SACS) was established in 2008 to oversee the management of civil service. Structurally, SACS is affiliated with the Ministry of Human Resources and Social Security; however, it is under direct leadership and supervision of the State Council. There are five departments at SACS, each in charge of different issue areas; one of them is the Department of Exam and Recruitment, which is devote to implementing NCSE at both national and local levels.

With both the *Civil Service Law* and SACS in place, NCSE has become fully institutionalized as the legally mandated channel for elite recruitment. It marks China's return to a meritocratic elite recruitment system in the modern era.

2. Civil Service: Professionalized Political Elite Class

The Civil Service Reform

The previous section briefly mentioned the personnel reform launched by the CCP leadership in the 1980s and 1990s. In an effort to modernize and professionalize the government bureaucracy, a serious of reform measures were introduced to revamp the personnel system. One important product of the reform was the civil service.

To understand the difference between the civil service and its predecessor, the cadre system, it is helpful to examine the legal definition of civil serviants. The first legal document governing the civil service, *Provisional Regulations on the National Civil Service* of 1994, did not provide a very clear definition, but it stated that,

> *Article 3.* This document governs all personnel other than service staff working in government administrative organs.

According to this definition, cadres working in state administrative organs were classified as civil servants. Given the parallel systems of party and state institutions at each level of government, which remains unchanged in the reform era, "state administrative organs"

effectively refer to party and state organs in the government. In the *Civil Service Law* enacted in 2006, a more detailed definition of civil servants is given.

> *Article 2.* The term "civil servants" as mentioned in the present Law refers to those personnel who perform public duties according to law and have been included into the state administrative staffing and whose wages and welfare are borne by the state public finance.

The definition declares that, among those who perform public duties, civil servants are those who must have been included in the state "administrative staffing" (*xinzheng bianzhi*). This detail is particularly important, as "administrative staffing" constitutes only part of the cadre system. The cadre system consists of both government administrative organs and public institutions, collectively referred to 'as 'public bureaucracies" by Ang (2012) . Although personnel working in both types of organizations (with the exception of service staff) are considered cadres and paid by state public finance, only those working in government administrative organs are included in the state administrative staff; in contrast, those working in public institutions are considered institutional staffing *shiye bianzhi*.

As such, even though the army of cadres in the public sector still ponderous, the civil service – or the government bureaucracy proper – is a rather lean operation. Contrary to the popular belief that the civil service is bloated, there are roughly only 7 million civil servants at all five levels of the government today.[5] In contrast, the public sector as a whole employs over 50 million, but most of them work in public institutions that provide public services in a semi-governmental capacity.[6] The size comparison between the civil service and the entire

[5]According to a report by the Department of Human Resources and Social Security of China, there are a total number of 7.167 million civil servants as of 2015. See http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/buneiyaowen/201605/t20160530_240967.html

[6]According to one estimate, the public sector in China employs over 50 million people. This includes both civil servants and employees of public institutions (*shiye danwei*) but excludes employees of state-owned enterprises. See more details from a report by *Phoenix Weekly* at http://blog.sina.com.cn/s/blog_4b8bd1450102edb0.html (accessed on December 29, 2016).

public bureaucracy illuminates an important fact, which is that the civil service is a more exclusive subset of the cadre system.

As made clear by the speech given by Zhao Ziyang at the 13th CCP National Congress in 1987, the party envisioned a modernized and professionalized bureaucracy inside the government.[7] The old cadre system, staffed with personnel in all public sector organizations, was too unwieldy to be efficiently managed by the party. Part of the personnel reform was to devolve some of the party's personnel management responsibility to various state agencies. At the same time, however, the party did not intent on relinquishing control of the core government bureaucracy. Creating the civil service as a distinct entity within the cadre system allowed CCP to manage its government personnel differently than the rest of the cadre system. Following the reform, the management of cadres in public institutions is overseen by a state ministry, whereas civil servants are managed by the State Administration of Civil Service, under the direct supervision of the State Council and the Department of Organization of the CCP.

Although the civil service is small and selective in comparison to the old cadre system, it spans all loci of political power, as the definition of "government administrative organs" is rather broad. Unlike civil service in the west, which is essentially the executive branch of the government, the Chinese civil service encompasses many, if not all, political jurisdictions. First, it includes cadres working in both party and state institutions at each level of the government, given the parallel organizational setup. Second, at each level, the civil service encompasses not only government departments and agencies that implement laws and policies, but also the People's Congress and People's Political Consultative Conference, which are the legislative branch in the political system. Third, institutions in the judiciary branch, including the courts and procuratorates, are part of the civil service, where judges and procurators are civil servants. Lastly, key allies of CCP, including social organizations

[7] Ibid. 3.

such as the All-China Women's Federation and the United Front democratic parties, are also included in the civil service. Together, the makeup of the civil service ensures that it encompasses all locations of political power. By centralizing them under the umbrella of the civil service, CCP can effectively and efficiently manage the personnel and other decisions.

Civil Servants' Elite Status

One important difference between the Chinese civil service and its western counterpart is that, due to the absence of publicly elected office, there is no clear distinction between "politicians" and "bureaucrats" in China; although the civil service is sometimes referred to as the "bureaucracy" (*guanliao tixi*), its jurisdiction encompasses the making, enforcement and adjudication of law, as well as policymaking and implementation. Civil servants, therefore, represent the political elite class that discharges different types of political power in the regime. Leaders of both party and state apparatus from township level all the way to the central government are by law civil servants. Moreover, just like the cadre system in the earlier era, the Chinese civil service is a closed hierarchy that promotes leaders strictly from within and recruits new blood only at the very entry level. As a result, civil servants are the only ones in the Chinese society with a possible career trajectory that leads to political leadership positions.

The elite status of the civil service is reflected not only in its selectiveness and exclusiveness, it is also manifest in the prestige its power accords. The seven million civil servants are at the core of the ruling coalition that CCP seeks to build. In order to make sure that each civil servant – regardless of his or her rank – has a stake in the continued survival of the regime, the party showers them with generous benefits and privileges unavailable outside the system. Even as the market reform transforms the Chinese economy and rewards economic activities, CCP makes sure that the ruling elites continue to reap disproportionate benefits from their government offices.

Exhibit A of the privileges civil servants enjoy is an income premium for the entire profession (Liu 2015). Based on multiple waves of data from the Chinese Household Income Project (CHIP), we see that, not only is there a significant income effect for being a civil servant, the effect has grown considerably over time. In 1988, at the beginning of the civil service reform, the income gap between civil servants and the rest is rather small; the distance has since widened, even as the private sector became more profitable. After controlling for individual attributes that could influence income level, e.g., age, education, etc., we see that civil servants still enjoy an income premium as large as over 40% in 2008 (Table 2.2).

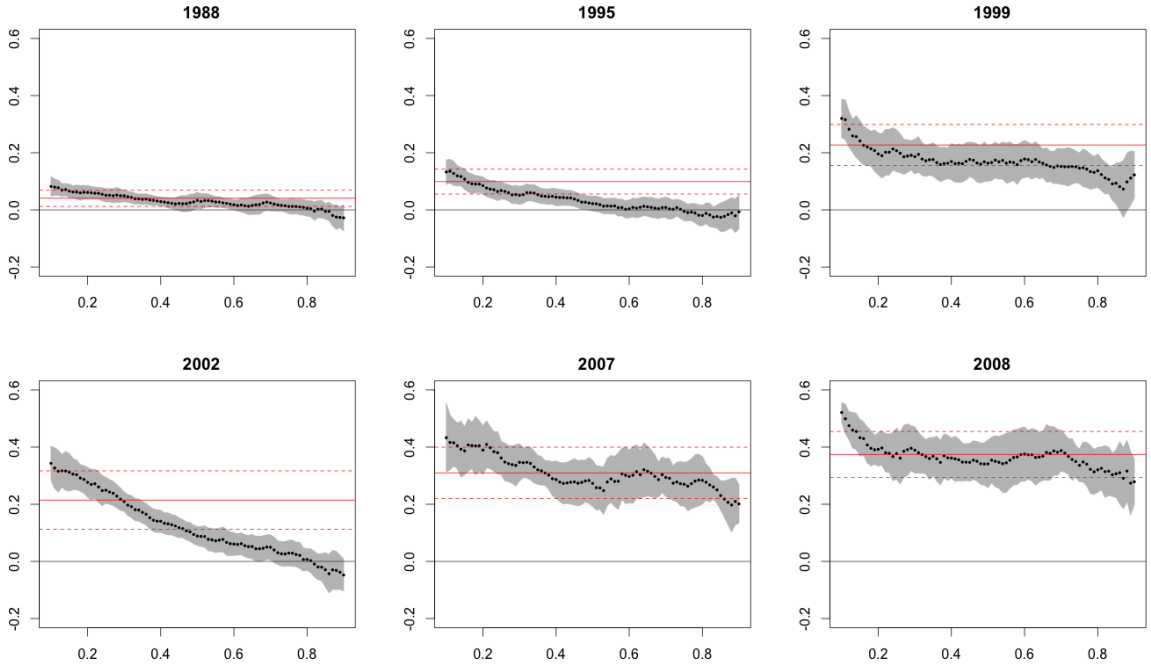
Table 2.2: Income Premium for Civil Service

	1988	1995	1999	2002	2007	2008
civil servant	0.073***	0.170***	0.229***	0.321***	0.361***	0.408***
	(0.012)	(0.022)	(0.030)	(0.025)	(0.057)	(0.042)
Obs.	17337	12551	6601	11609	7067	7008

Note: This table reports the OLS coefficient estimates of logged income on the dummy variable "civil servant." The regression controls for individual-level covariates including gender, age, ethnicity, and education. Please see Table 2.3 for full results.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

More importantly, quantile regression analysis reveals that the income premium is *not* driven by those at the top inside the civil service; on the contrary, it is larger towards the lower end of the income distribution (Figure 2.1). This indicates that civil servants do not have to rise to high ranks or leadership positions to benefit from their insider status. Rather, once an individual enters the civil service, he or she would see an immediate boost in income even at the entry level. The distribution of income premium within civil service shows that CCP makes sure that all civil servants – regardless of their rank or position – are better off economically compared to their peers outside the government.

Figure 2.1: Quantile Regression Estimates of Civil Service Income Premium



Note: The six plots report quantile regression estimates for civil service income premium for different years. The quantile regression controls for individual-level covariates including gender, age, ethnicity, and education. The black dotted line in each plot represents the point estimate from the quantile regression; the gray band represents its 95% confidence interval. The red solid line represents the OLS point estimate; the pair of red dashed lines represent the 95% confidence interval.

The income premium can be attributed to two possible sources. First, civil servants' salary is generally higher than their peers of comparable qualification in other professions. Since the 1990s, the central government has gone through several iterations of salary reform for civil servants, allowing local governments to disburse allowance out of local public coffers without much supervision or regulation by Beijing. The central government has also administered several across-the-board salary raises. In short, the pay scheme in the civil service provides its employees ample income. Second, despite the market reform, the Chinese government still plays a prominent role in economic development as the coordinator of economic activities and manager of key resources (such as land). As such, civil servants, especially those in leadership positions, often engage in rent-seeking activities that bring handsome material gains. The anti-corruption campaigned waged by Xi Jinping in recent years may have reigned in some of the activities, but, short of a institutional overhaul, the system is still prone to corruption that benefits senior civil servants personally, i.e., "corruption by design" (Manion 2004).

In addition to monetary benefits, civil servants also enjoy privileged access to scarce social resources such as health care, pension, and housing. Specifically, the current system of social health insurance in China gives civil servants extremely generous and comprehensive coverage that is not available to those outside the government, although they have the same contribution scheme as other urban employees. Similarly, civil servants are the only group that continue to receive full pension directly financed by the state, whereas other urban employees, including those in public institutions, have moved to a system of individual and employer contributions; this means that civil servants suffer from little to no pay cut upon retirement while others experience a significant reduction income during retirement.

The material benefits civil servants receive, although a significant premium, do not make them the most well-off group in the Chinese society. In contrast, it is the high social esteem and prestige civil service enjoy that truly makes them the elite class. The Chinese culture,

for centuries, has venerated the official gentry class. Since the Chinese society operates with a unique but pervasive relational culture of personal connections, or *guanxi*,[8] being inside the government is perceived as being closed to the power center. The proximity to political power both commands respect and unlocks many scarce resources for civil servants. Regardless of one's rank inside the government, being a civil servant signals a status of political insider.

Taken together, both the tangible and intangible benefits that civil servants receive not only make them the political elite class *du jour*, but also make the civil service a highly coveted profession. The opportunity to enter the civil service, therefore, represents a chance to move up the socioeconomic ladder, especially for those from non-elite background.

3. NCSE: Open and Meritocratic Recruitment

As part of the personnel reform, the National Civil Service Examination (NCSE) was introduced in the 1990s. Following the *Tentative Regulations on the National Civil Service* in 1993, experiments of open and competitive examination was carried out by both the central and local governments in their recruitment of new civil servants. Like many other major policies in China, a national policy of civil service exam emerged gradually based on local experiments and experiences of trial and error. The institutional structure and substantive content of NCSE was standardized over time. With the enactment of the *Civil Service Law* in 2006, as well as subsequent supporting measures governing various aspects of civil service recruitment,[9] NCSE became fully institutionalized in the sense that 1) it is mandated by law as a national policy; 2) there is a state agency, i.e. the State Administration of Civil Service (SACS), devoted to overseeing and regulating its implementation; and 3) actors involved in the process would face disciplinary and/or legal actions if they do not play by the rules.

[8] According to (Bian 2002), *guanxi* is defined as the "interpersonal connections of sentiments and obligations that dictate social interaction and facility favor exchanges."

[9] These documents include *Regulations on Civil Service Recruitment (2007)*, *Disciplinary Measures for Violations in Civil Service Exam*, and *Provisions on the Organization and Management of Interviews in Civil Service Recruitment (2015)*.

One of the main motivations for CCP to introduce an open and meritocratic recruitment system like NCSE is to select good bureaucrats who are ideologically loyal to the regime and have the compatible skills and necessary expertise for their jobs. This rationale based on governing capacity is clearly laid out in many government documents. In the meantime, there is another important consideration that goes into establishing a open and meritocratic elite recruitment system, which is to allow a great number of Chinese citizens to have a realistic chance of becoming part of the ruling elite. In other words, NCSE is to serve as a platform that provides upward mobility for individuals to move from non-elite to elite class, or at least to create a perception of upward mobility among Chinese citizens.

Although the upward mobility rationale is never explicitly stated, since it would be awkward for CCP to admit to its elite status while it is supposed to be the vanguard of the people, official documents repeatedly call for open and fair procedure in NCSE. Many measures that have been put in place to further institutionalize NCSE are specifically aimed at making the exam transparent and free of patronage influence, such that all candidates, regardless of family background or social connections, have a fair chance of competing based on their performance and ability. Perhaps even more telling of this upward mobility motivation is how the government promotes and publicize NCSE to the general public. News coverage on this topic by government media outlets constantly touts the opportunity NCSE provides for ordinary citizens to enter the political elite class. In particular, the notion of *fanjin bikao* (i.e., all entries via exam) is repeatedly mentioned by the *People's Daily* as a guiding principle for NCSE . Based on my archival research, between 1996 and 2012, the official party newspaper published 73 articles mentioning this key term, 18 of which appeared in the pages of top news (*yaowen*). Many news stories on NCSE share the narrative of how the open and fair competition allows capable individuals from non-elite background to join the government. For instance, a *People's Daily* article in 2012 on the front page highlights that 87.1% of the over 15,000 newly recruited civil servants in the central government in

2011 came from none-elite families; the figure for 2010 was even higher at 93.4%.[10]

It is evident from the CCP propaganda effort that the regime sees NCSE as a platform that provides *all* with an opportunity to compete for government positions. Perhaps more importantly, the party tries to make its citizens perceive NCSE as a viable channel of upward mobility. The rest of this section provides a close examination of NCSE in terms of 1) institutional structure and process and 2) content of the exam to show that the recruitment system is set up – both procedurally and substantively – in a way that gives a chance to as many people as possible.

Institutional Structure and Process

a). Multiple Exam Opportunities

The civil service exam takes place on an annual basis. Although NCSe is a national system as indicated by its name, the exam is administered by the central government and provincial governments separately to fill the new entry-level positions under their respective jurisdiction.

The exam administered by the central government, commonly known as the "state exam" (*guokao*), is held every November to recruit new civil servants for departments and agencies in the central government. The number of positions fluctuates somewhat from year to year, averaging around twenty thousand in the past five years. Geographically, most of these positions are located in Beijing, although some are in the local offices of departments under the direct supervision of the State Council, such as the State Administration of Taxation and the General Administration of Customs. The positions offered by the state exam are highly coveted, since they are close to the political power center and usually have a promising career trajectory in the central government. Another source of their popularity is the fact that most of these positions are in Beijing and come with a Beijing household registration

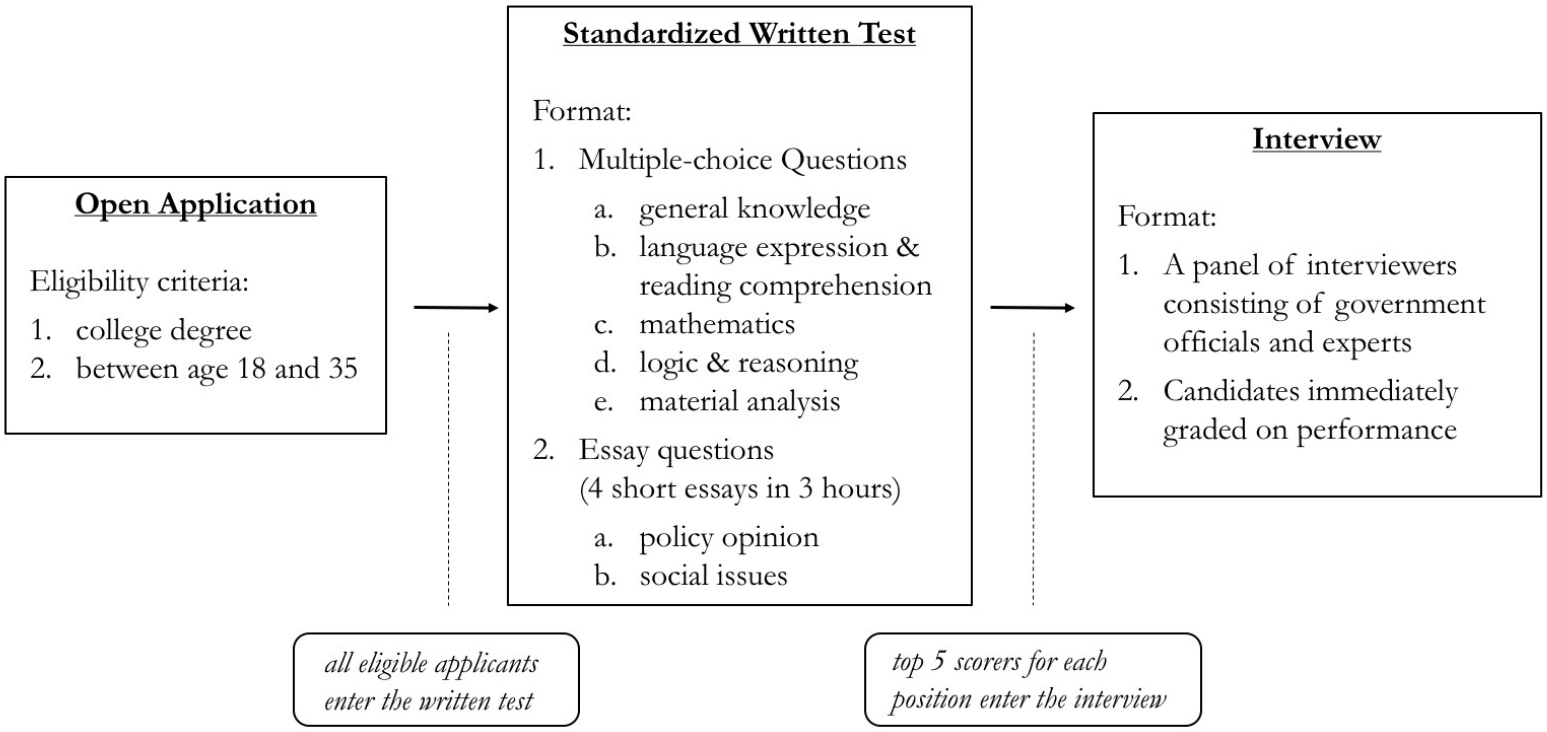
[10]People's Daily (*Renmin Ribao.*). March 2, 2012. "Central Government Recruits New Civil Servants; Over 80% Come from Ordinary Families." (*Zhongyang jiguan xin luyong gongwuyuan, yu bacheng laizi putong jiating.*)

(*hukou*), which is a thing of value in and of itself.

The great majority of civil service positions, however, are offered via the exams administered by provincial governments, often referred to as the "provincial exams" (*shengkao*). They typically held in March or April each year; with few exceptions, most provinces hold the exam on the same day every year. Although provincial exams may not be deemed as prestigious as the state exam, they offer far greater numbers of positions – both in total and per capita – as the exam in each province covers all four levels of local governments under its jurisdiction (i.e., at the levels of province, prefecture, county, and township). The number of positions in each province ranges from a few thousand to over ten thousand, depending on its population size. For many potential candidates, provincial exams offer a more realist opportunity, both because the competition is (slightly) less fierce and because the job openings are in the locality of their residence.

The existence of both the state exam and provincial exams provides individuals with different options based on their ability and preference. The fact that the two exams are scheduled at different times of the year also allow candidates to apply more than once in order to maximize their chance. Both the state exam and provincial exams adopt the same procedure; the questions on written tests for all exams come from the exam question depository at the SACS. This ensures that candidates do not have to prepare for the two exams separately if they are interested in taking both.

Figure 2.2: NCSE: Selection Process



b). Minimal Eligibility Criteria

As illustrated in Figure 2.2, NCSE begins with an open call for applications every year. The respective governments in charge of administering the exam first make a public announcement, together with a list of open positions. Individuals interested in taking the exam subsequently apply for a *specific* position rather than a general qualification.

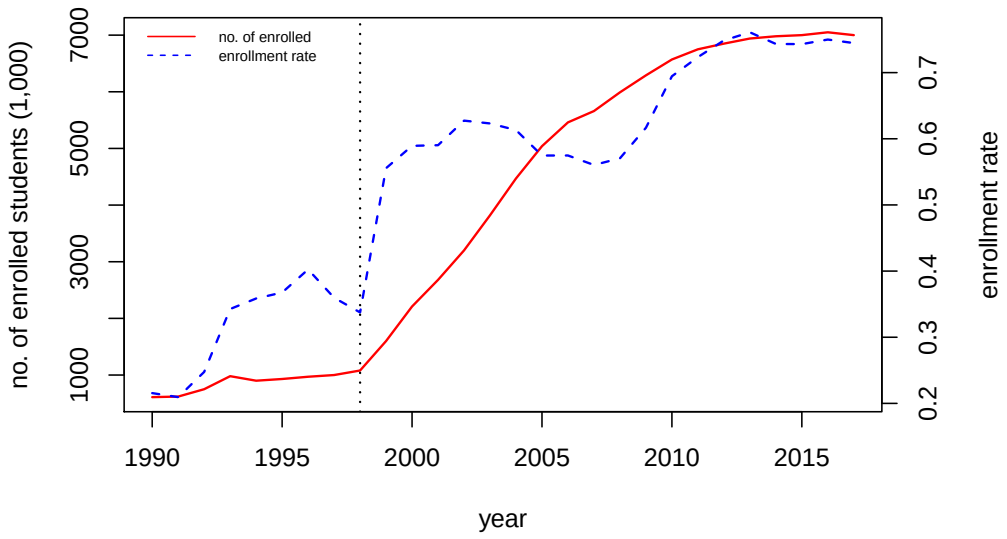
One defining characteristic of NCSE that makes it an open and inclusive platform for competition is that it only has two basic requirements a Chinese citizens must satisfy in order to be eligible to take the exam:

1. having a college degree, and
2. being between the age of 18 and 35.

Although some positions have additional requirements regarding applicants' academic major, education degree, or work experience, the education and age requirements are the only two hard eligibility criteria. This means that *all* college-educated youths in China have a chance to enter the civil service. Their decision whether to apply and compete for civil service jobs is no longer dictated by officials with personnel authorities (such as the CCP branches in universities) at a single time point (such as upon graduation); instead, now they can freely choose to take the civil service exam for any year (or years) of their choosing, as long as they remain age eligible.

The openness and inclusiveness of NCSE is further bolstered by the expansion of college enrollment in China since 1999, which has seen a sharp increase in college-educated population. College admission rate jumped from 34% to 56% between 1998 and 1999 and continued to climb steadily in subsequent years. Since 2012, the admission rate has stayed around 75%, with roughly 7 million high school graduates entering college each year (see Figure 2.3).

Figure 2.3: Expansing College Enrollment



Note: Statistics presented in this graph are compiled by the author from media reports. The dotted vertical line in the graph is drawn at year 1998, which is the last year before the policy of college expansion was implemented.

As a result, a growing number of Chinese youths are college-educated and hence eligible for NCSE. According to government reports, individuals with college education constituted only 3.61% of the population in 2000 when college expansion first started; the percentage increased to 8.93% in 2010 and to 12.45% in 2015.[11] The figure is even higher for younger age groups and urban dwellers. Based on data from the Chinese General Social Survey (CGSS), which uses a national representative sample, for the year of 2013, the percentage of college-educated respondents among all is 16.27%; it is 36.62% in the age group between 18 and 35, which can be further broken down into 66.48% for those born with an urban *hukou* and 22.36% for those born with a rural/agricultural *hukou*. All the all, these figures indicate that a large (and still growing) portion of Chinese youths nowadays have the option of taking NCSE, should they want to enter the civil service. The parsimonious eligibility

[11]These statistics are from two government documents, including a report on the 2010 National Census published by the National Bureau of Statistics (see http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/qgrkpcgb/201104/t20110428_30327.html) and a report on the 2015 1% National Population Sample Survey (see http://www.stats.gov.cn/tjsj/zxfb/201604/t20160420_1346151.html).

criteria of NCSE render the exam highly inclusive.

c). Two-Stage Selection Process

As indicated by in Figure 2.2, the selection process of NCSE consists of two stages – a written test for all eligible applicants and a subsequent interview conducted by government officials. Since applicants apply and compete for specific positions, the interview is granted to the top five scorers on the written test for each position. Final decisions are then made primarily based on candidates' interview performance.

In term of transparency and fairness, the written test presents less of a challenge. Although cases of cheating are occasionally reported, they are few and far between, as the penalty for such behavior is severe. Moreover, as a measure of deterrence, and perhaps also to demonstrate the government's resolve to make the exam fair for all, rigorous vetting and state-of-the-art technologies are conspicuously deployed at exam venues to prevent identity fraud and cut off channels of communication.

Compared to the written test, selection during the interview is much more intricate. Typically, a group of government officials form a panel of interviewers to evaluate candidates and give scores accordingly; scores for each candidate are then tallied to determine the final selection. According to NCSE guidelines, interviewers are expected to evaluate candidates based on *only* interview performance, and interviewers are provided with no additional candidate information. In reality, however, it is common that candidates try to reach out to interviewers or other government officials before the interview in an effort to increase their chance of selection. These efforts to "pull strings" are usually made via family ties and personal connections, and they are met with varied degree of success.

In order to reduce, if not completely eliminate, such practice, over the years, many provinces have implemented additional measures to further improve transparency and fairness of NCSE, especially at the interview stage. The most widely adopted measures include

double-blind interview assignments and shuffling of interview sites (such that neither the interviewers nor the candidates have any prior information on the other party so coordination between them is less likely), dropping the highest and lowest interview scores for each candidate (such that extremely partial opinions do not influence final selection), and immediate score release (such that there is no tampering with selection results after the fact). While these measures cannot completely eliminate the influence of patronage and nepotism, they have significantly reduce such practice (Interview F14061; B14079; B14082; J14112; H15091). Furthermore, in 2015, the central government issued the *Provisions on the Organization and Management of Interviews in Civil Service Recruitment*, which makes many of the aforementioned measures mandatory, requires interviewers to undergo mandatory training, and spells out disciplinary action if interviewers violate the rules. Taken together, these measures reflect a sincere effort by the central government to reduce non-meritocratic behavior and other types of malpractice during NCSE interview.

Content of Examination

Equally important as the institutional structure of NCSE is the content of the exam. Since what appears on the exam to a large extent determines who gets selected, the content of NCSE is critical in ensuring that the system does not discriminate candidates based on their background or create too much path dependence that disproportionately rewards candidates who have always been "on the right track." In other words, while selection in NCSE must be based on merit, the notion of "merit" should not merely be a synonym for privileges and structural advantage such as having been born into a large city or having attended a good public school (both of which contribute to a candidate's competence); instead, it should also reflect an individual's innate ability and drive to succeed, which are also highly valuable attributes in a candidate. Overall, the format and questions used in NCSE strike a balance between evaluating a candidate's natural aptitude, human capital accumulation

(i.e., education achievement), and investment of effort.

As illustrated in the second box in Figure 2.2, the standardized written test in NCSE comprises two parts, a multiple-choice section and an essay question section. The former, formally known as "government professional aptitude test" (*xingzheng zhiye nengli ceyan*), is a two-hour session with 135 multiple-choice questions. The questions are classified into five categories, namely 1) general knowledge (including topics such as domestic policy issues, world affairs, science, and literature that reflect a candidate's breadth of knowledge), 2) language expression and reading comprehension (similar to the verbal section on the SAT or LSAT in the United States), 3) mathematics, 4) logic and reasoning, and 5) material analysis (which simulates policy analysis scenarios). The second part of the test, formally known as "argumentation" (*shenlun*), asks candidates to write four short essays in three hours. The essay questions are argumentative or propositional in nature and they are generally concerned with either national policies or social issues.[12]

Similar to the SAT and other general standardized tests in the United States, the multiple-choice questions in NCSE help identify candidates with higher aptitude and better education. Candidates who grew up in a more informed environment or had exposure to better educational resources have an advantage in answering some of these questions. However, the large quantity of questions that one must answer under extremely tight time constraint makes practice and preparation for the test extremely important. On average, candidates have less than one minute for each question. Unless they are familiar with the types of questions and have some built-in muscle memory on how to tackle them (especially the mathematics questions), it is very hard to complete all questions in time, let alone doing so correctly. Similarly, candidates can hone their essay writing skills rather quickly if they are willing to invest the time and effort, especially since the essay questions are designed to test their familiarity with current issues and government policies rather than their ability to

[12]Please see appendix for a sampling of NCSE questions.

debate on philosophical ground.

Following the written test, the five top scorers for each position enter the next stage, i.e., the interview. Questions asked during NCSE interviews are oriented towards problem-solving; they primarily test candidates on their real world experience and interpersonal skills.

In short, with the types of questions used in the exam, selection in NCSE is based on candidates' demonstrated merit. This merit, however, is not purely a function of longterm human capital accumulation (such as upbringing and schooling) alone; it also factors in innate aptitude and the amount of effort invested towards NCSE. As such, although candidates from more privileged background do enjoy an advantage, those from more humble origins do also stand a chance. In fact, during my interviews with highly experienced instructors at a nationally renowned exam preparatory school that specializes in NCSE, they stressed repeatedly that, with practice and hard work, candidates who graduated from second-tier universities have as good a chance of succeeding in NCSE as candidates from elite universities (Interview B14102; B14103; H14101). Given that students from rural areas or less developed provinces are less likely to enroll in elite universities in China, either due to lack of quality education or smaller enrollment quotas, NCSE gives them a second chance to catch up on the socioeconomic ladder.

This is an extremely important feature of NCSE, that an individual can compensate their structural disadvantages with hard work. As long as a candidate is above a certain threshold of intelligence and aptitude, what he lacks in longterm human capital accumulation he can make up with focused preparation for the exam. Although it is debatable whether this selection mechanism leads to an optimal outcome for the government,[13] it does give millions of Chinese youths a realistic opportunity to become part of the ruling elite, even if they have not always come on top in their schooling years.

[13]On separate occasions during my fieldwork, I heard remarks by academics and government officials alike that NCSE recruited civil servants who were "exam smart" but did not necessarily have policy acumen. In the meantime, they acknowledged that NCSE had standardized the process and significantly reduced patronage-based selection.

Moreover, since exam preparation requires substantial effort, it filters off candidates who are less serious about working for the government. Although the questions on the test do not directly evaluate candidates' political loyalty, it is reasonable to argue that those who are more loyal to the regime (or, at least, more enthusiastic about working for the government) are more likely to work hard for the exam and subsequently succeed. By allowing candidates' effort – rather than accumulated human capital alone – to partially determine their exam performance, NCSE is able to measure, albeit only approximately, candidates' political loyalty and select on it.

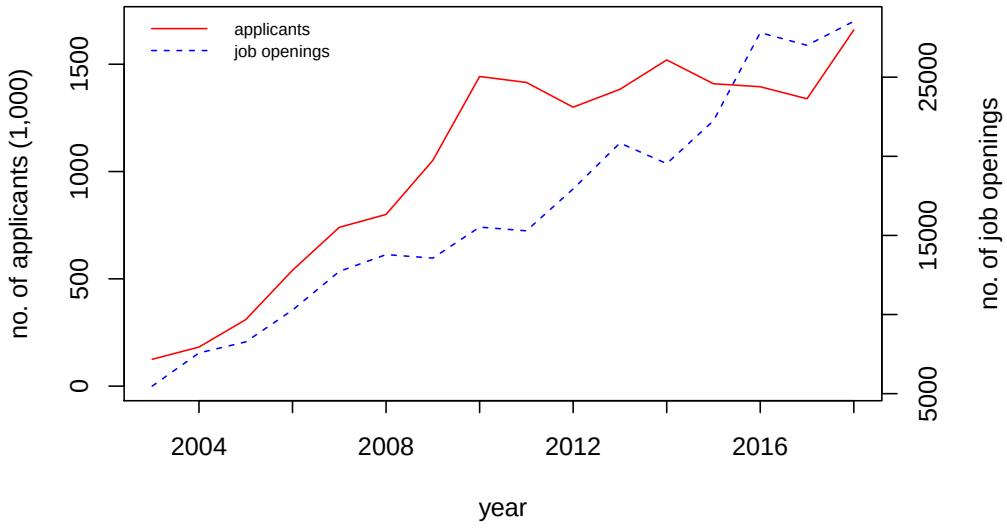
In a nutshell, the exam content of NCSE lets candidates compete on their effort as well as intelligence and human capital accumulation. This gives many a second chance at entering the elite class even if they did not attend elite universities for one reason or another.

Public Response to NCSE

The introduction of NCSE was met with immense public enthusiasm. College-educated youths, regardless of family background, *hukou*, or employment status, were suddenly given an opportunity to apply for government positions. The popularity of NCSE is illustrated in Figure 2.4, which shows the numbers of job openings and applicants for the state exam (*guokao*) between 2003 and 2018. The yearly number of applicants has exceeded one million since 2009, and the applicant-position ratio has consistently stayed above 50:1. Provincial-level exams are slightly less competitive, with a yearly average applicant-position ratio of approximately 30:1 between 2007 and 2014.[14]

[14]There is no official release of statistics on NCSE in each province. To calculate this ratio, I collect the number of positions and the number of applicants in each province by searching media reports and local newspaper articles that quote relevant authorities on this issue, and compile the statistics for 20 provinces (where such statistics are available) between 2007 and 2014.

Figure 2.4: Yearly Number of Applicants and Openings in State Exam (2003-2018)



Note: Statistics presented in this graph are compiled by the author from media reports.

The sustained popularity of NCSE indicates not only the attractiveness of civil service as a career choice, but also the fact that NCSE is perceived as a realistic and viable channel of upward mobility for many. Prior to NCSE, the government had a "job assignment" system, in which it *unilaterally* identified and recruited individuals deemed qualified for jobs in the government; the system did not provide any opportunity to individuals who were interested in working for the government but did not have any prior connections – personal or professional – with cadres in charge of recruitment in order to be considered. Since the vast majority of ordinary citizens did not have connections with the government, they could not even apply to jobs inside the government even if they wanted to. In contrast, NCSE opened up the recruitment platform to all age-eligible college-educated youths. As discussed earlier, many of its features, both institutional and substantive, make sure that not only is the system largely merit-based in its selection, it also takes care to encourage those from less advantaged or privileged background to apply and compete. The content of the exam tests applicants on both their natural aptitude and their familiarity with the subject matters; it

rewards talent but also effort. This gives hope to many who did not come from top-tier universities. Moreover, NCSE allows applicants to take the exam for multiple times in both the state exam and provincial exam without discriminating repeated takers, as long as they remain age-eligible. This feature lets many remain hopeful of their upward mobility prospect even after failed attempts (Interview B14109; B14122; F14062; J14114).

The effect of NCSE is evident not only on college-educated youths' perception of upward mobility, it is also manifest in their socioeconomic and political attitude. Interview evidence suggests that, while acknowledging growing inequality, they are more tolerant of it (Interview B14072, B14109, F14062, F14064). Also, while cognizant of the problem of petty corruption by many government officials, they hesitate to condemn the practice; instead, during my interviews with many applicants, it was implied – and, in one case, explicitly expressed – that petty corruption was "part of the benefit package" they expected to receive if they could succeed in NCSE (Interview B14083).

Beyond college-educated youths, NCSE has received widespread support among the public. Although not everyone is eligible to compete, the public welcomes an institutionalized merit-based system for elite recruitment for reasons including procedural justice (Interviews B14085, B14086), improvement in local government service (Interviews H14102 J14112), and potential upward mobility for family members and relatives. In short, NCSE helps boost the legitimacy of the CCP regime.

NCSE, therefore, has profound implications for the CCP regime. The upward mobility generated by the institutionalized merit-based elite recruitment makes a significant segment of the Chinese society – those with college education – more optimistic about their upward mobility chances and more tolerant of existing inequality in the regime. By promising an open and transparent recruitment process, the regime manages to reduce their discontent and thus strengthen its own survival without making any significant payout.

Appendix

NCSE Sample Questions

Below are some sample questions that are representative of the ones candidates see on the written test of the NCSE. For the multiple-choice section, I present two questions for each category, while the total number on the written test is 135.[15] As illustrated by these questions, the written test of NCSE evaluates candidates on two dimensions of competence, namely their intelligence (i.e., both innate aptitude and accumulated human capital) and preparedness (i.e., the ability to learn and improve in a short period of time).

Multiple-Choice 1: General Knowledge

1．我国宪法对非公有制经济的规定进行了几次修改，按时间先后排序正确的是（　）
①允许发展私营经济，采取“引导、监督、管理”的方针
②在法律规定范围内的个体经济、私营经济等非公有制经济，是社会主义市场经济的重要组成部分
③鼓励、支持和引导非公有制经济的发展，并对非公有制经济依法实行监督和管理
④非公有制经济仅限于个体经济，不包括私营经济，且个体经济处于补充地位
A．①②④③
B．①③②④
C．④①③②
D．④①②③

8．假如地球重力加速度减为现在的一半，下列数值不会发生变化的是（　）
A．鱼在相同水深下受到的压强
B．船在水中的吃水深度
C．人在体重计上的称量结果
D．人可以举起的石块的最大质量

[15]Source: Civil Service Information Network (http://www.gjgwy.org/).

Multiple-Choice: Language Expression and Reading Comprehension

24. 历史认识的局限性成就了历史研究的魅力。历史认识有局限性，才需要人们不断拷问、修正和创新。如果研究者因此而敬畏研究对象，兢兢业业，_____，这正是历史研究的幸事。反之，如果把历史认识的局限性作为规避责任的遁词和主观臆断的托词，人们就会愈发相信历史毫无_____可言。

依次填入画横线部分最恰当的一项是（　）

A. 身体力行　科学性

B. 恪尽职守　公平性

C. 如履薄冰　客观性

D. 谨言慎行　系统性

37. 南京在历史上的名字变化或褒或贬，根本源头在于统治者的好恶。不惟南京，同样原因也引发了其他地名的变迁，宋廷平定方腊起义之后，深恨江南百姓造反，艺术修养最高的皇帝宋徽宗遂在地名上做文章：方腊的两个活动区域，歙州被改成徽州，取的是“徽”的本意“捆绑束缚”；睦州则被改成严州，意思更是不言自明的。相比之下，朱元璋为避国号讳，取“海定则波宁”之义，将明州改成宁波，已是很“友好”了。

这段文字主要介绍了（　）

A. 地名变迁背后的政治因素

B. 历史事件对地名的影响

C. 古代帝王在地名方面的偏好

D. 统治者对某些地域的好恶

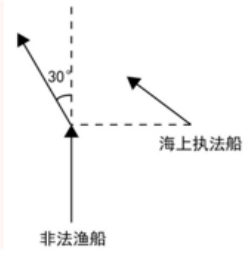
Multiple-Choice: Mathematics (Quantitative Relations)

62. 某单位的会议室有 5 排共 40 个座位，每排座位数相同。小张和小李随机入座，则他们坐在同一排的概率（ ）

A. 不高于 15%　　B. 高于 15%但低于 20%

C. 正好为 20%　　D. 高于 20%

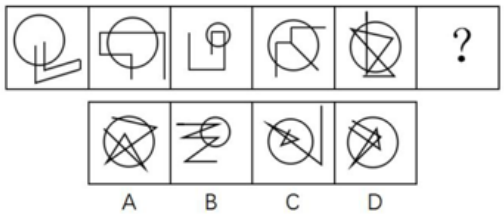
71. 一艘非法渔船作业时发现其正右方有海上执法船，于是沿下图所示方向左转 30°后，立即以 15 节（1 节=1 海里/小时）的速度逃跑，同时执法船沿某一直线方向匀速追赶，并正好在某一点追上。已知渔船在被追上前逃跑的距离刚好与其发现执法船时与执法船的距离相同，则执法船的速度为多少节（ ）



A. 20　　B. 30　　C. $10\sqrt{3}$　　D. $15\sqrt{3}$

Multiple-Choice: Logic

76. 从所给的四个选项中，选出最合适的一个填入问号处，使之呈现一定的规律性（ ）



106. 扶贫必扶智。让贫困地区的孩子们接受良好教育，是扶贫开发的重要任务，也是阻断贫困代际传递的重要途径。

以上观点的前提是（ ）

A. 贫困的代际传递导致教育的落后

B. 富有阶层大都受过良好教育

C. 扶贫工作难，扶智工作更难

D. 知识改变命运，教育成就财富

Multiple-Choice: Material Analysis

2017 年 1～2 月，全国造船完工 936 万载重吨，同比增长 123%；承接新船订单 221 万载重吨，同比增长 133%。2 月末，手持船舶订单 9207 万载重吨，同比下降 22.6%，比 2016 年末下降 7.6%。

2017 年 1～2 月，全国完工出口船 907 万载重吨，同比增长 127%；承接出口船订单 191 万载重吨，同比增长 122%。2 月末，手持出口船订单 8406 万载重吨，同比下降 25.9%。

2017 年 1～2 月，53 家重点监测的造船企业（以下简称重点企业）造船完工 912 万载重吨，同比增长 133%。承接新船订单 197 万载重吨，同比增长 119%。2 月末，手持船舶订单 8874 万载重吨，同比下降 23.1%。

2017 年 1～2 月，重点企业完工出口船 886 万载重吨，同比增长 138%；承接出口船订单 171 万载重吨，同比增长 109%。2 月末，手持出口船订单 8129 万载重吨，同比下降 26.6%。

131．2016 年末全国手持船舶订单较同年 2 月末（　）

A．降低 16.2%

B．降低 2.2%

C．增加 16.2%

D．增加 2.2%

132．设 2017 年 1～2 月出口船完工量占全国造船完工量比重为 X，同期出口船承接订单量占全国承接新船订单量比重为 Y，2 月末手持出口船订单量占全国手持船舶订单量比重为 Z，则有（　）

A．X>Y>Z

B．X>Z>Y

C．Y>X>Z

D．Y>Z>X

133．2017 年 1～2 月，重点企业下列指标中同比增速最快的是（　）

A．造船完工量

B．承接新船订单量

C．出口船完工量

D．承接出口船订单量

Additional Tables and Figures

Table 2.3: OLS Estimates of Civil Service Income Premium

	1988	1995	1999	2002	2007	2008
civil servant	0.073***	0.170***	0.229***	0.321***	0.361***	0.408***
	(0.012)	(0.022)	(0.030)	(0.025)	(0.057)	(0.042)
male	0.134***	0.176***	0.223***	0.401***	0.339***	0.291***
	(0.011)	(0.021)	(0.030)	(0.041)	(0.025)	(0.014)
age	0.080***	0.148***	0.116***	0.139***	0.053***	0.068***
	(0.004)	(0.027)	(0.024)	(0.013)	(0.009)	(0.004)
age^2	-0.001***	-0.002***	-0.001**	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ethnic Han	-0.010	-0.019	0.000	-0.047	0.133	0.168**
	(0.017)	(0.042)	(0.046)	(0.061)	(0.145)	(0.079)
high school	0.074***	0.215***	0.250***	0.381***	0.236***	0.231***
	(0.008)	(0.017)	(0.023)	(0.034)	(0.041)	(0.019)
college	0.145***	0.340***	0.543***	0.835***	0.623***	0.664***
	(0.011)	(0.016)	(0.031)	(0.047)	(0.050)	(0.031)
constant	5.601***	5.078***	5.899***	5.234***	8.309***	8.067***
	(0.076)	(0.524)	(0.448)	(0.263)	(0.236)	(0.087)
Obs.	17337	12551	6601	11609	7067	7008

Note: This table reports coefficient estimates of OLS regressions of self-reported income (logged) on a dummy variable indicating civil servant. Standard errors are clustered at the city level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Chapter 3

Understanding Elite Preference in Recruitment

Notwithstanding the many benefits that a system of merit-based elite recruitment can bring for an authoritarian regime, including enhanced state capacity and upward mobility, its implementation ultimately depends on local elites, who are both allies and agents of the regime. Although regime survival is in their interest, other private considerations may lead them astray and cause their preference in recruitment to diverge from that of the regime. Before we examine how meritocracy is enforced in NCSE, it is imperative to first understand elites' preference in recruitment. As agents of the regime, do local government officials faithfully execute the will of the central government and recruit candidates based on merit alone? Or do they have any incentive to deviate from the meritocratic practice?

In this chapter, I delineate the multiple preference dimensions of Chinese local government officials when recruiting new civil servants during NCSE and estimate the effect of each preference dimension. My objective is to investigate whether local government officials, when unconstrained, act in the best interest of the regime.

1. Problem: Divergent Elite Preference

From the perspective of the dictator, political recruitment, when done correctly, can help him resolve two challenges in regime survival, namely *authoritarian power-sharing* among elites and *authoritarian control* over the masses (Svolik 2012). To address the first challenge, i.e., to maintain elite coherence, the dictator prefers to select individual with similar ideology.[1] Recruitment of new elites is hence often based on their support for the regime (sometimes indicated by membership to the ruling party, e.g., Walder 1995) or personal loyalty to the ruler (Haber 2006; Egorov and Sonin 2011). To address the second challenge, i.e., to manage the tension between the elite class and the masses, the dictator prefers to have capable individuals in his coalition, whose skills and ability can contribute to both the repression capacity and economic development of the state. In short, loyalty to the regime and personal competence are the two key qualities a dictator looks for when recruiting new members into the ruling class. In the case of China, the CCP has long championed the principle of "red and expert" in political selection, which embodies the two key qualities valued by the regime.

Although authoritarian elites largely share the dictator's goal of regime survival, their preference could diverge from the dictator's. On the one hand, they benefit from regime survival in the long term; one the other hand, they are motivated by personal gains in the short term. In the case of recruitment, elites often use government jobs as patronage and hand them out to those who are close to them (Stokes 2009; Robinson and Verdier 2013). As a result, while elites may value competence and loyalty in candidates, they may also favor those who have political connections.

It is important, therefore, to understand the multiple dimensions of local elites' preference, as they are often the ones in charge of recruitment. Does their preference diverge from that of the regime? How does that affect the supposedly meritocratic process? To answer

[1] According to Svolik (2012), the term *ideology* is used in a broad sense, "incorporating any nonmaterial factors that may affect a citizen's preference for the incumbent dictator vis-à-vis the challenger, including religious, ethnic, and charismatic attributes of the dictator and the challenger."

these questions, I look at how local government officials in China make selection decisions in NCSE when they have *unfiltered* information on candidates.

2. Empirical Strategy

To unpack local officials' multidimensional preference in elite recruitment, I independently designed and implemented a survey experiment in 2015. I employed a conjoint analysis (Hainmueller, Hopkins and Yamamoto 2014), where pairs of hypothetical NCSE candidate profiles were presented to respondents and they were asked to choose which one to recruit. The survey was conducted among over 300 government officials *exclusively*, which rendered the survey questions highly realistic for respondents and allowed for data collection from a sample closely resembling the actual decision-making body. To my knowledge, this is the first conjoint experiment conducted among government officials in China.

Challenges in Studying Authoritarian Political Selection

There are several key challenges in measuring the effects of competence, loyalty, and political connections on political selection. Studies using observational data often encounter the problem of correlated individual attributes or multiple attributes being bundled in one piece of information. The observational equivalence renders interpreting causal relations difficult. In China, as the CCP tries to co-opt capable individuals into the ruling class, signals of loyalty can sometimes imply competence. Similarly, individuals with political connections are more likely to have access to better education and other resources that make them more competent; and they may also be perceived as more loyal to the regime. By employing a conjoint experiment, I overcome this challenge by measuring the *marginal* effect of each attribute, i.e. the attributes are orthogonal to one another by design. The use of both choice-based and rating-based questions also provides an opportunity to parse out the effect of each attribute in selection decisions.

Another confounding factor in studying political selection with observational data is the issue of name recognition, especially when dealing with the effect of political connections. When a candidate is associated with a political elite with name recognition in real life, what is being measured is the effect of association with that particular individual rather than the effect of political connections *per se*. Moreover, in an authoritarian setting, the effect of association with a recognized name may go in either direction, depending on the relationship between the selector and the elite associated with the candidate (i.e., either allies or adversaries). Without complete information on the internal dynamics among elites, it is impossible to achieve an accurate estimate of the effect of political connections. By using hypothetical candidates, the conjoint experiment ensures that respondents' evaluation of political connections is not interfered by name recognition.

For all the problems of working with observational data to understand entry-level political selection in China, the biggest challenge is the lack of data. To overcome this problem, scholars often resort to survey methods. One main concern with using traditional survey methods to study this topic is the issue of social desirability bias (DeMaio 1984; Nadeau and Niemi 1995; Tourangeau and Yan 2007). The use of a conjoint experiment limits social desirability by simultaneously presenting multiple attributes in one profile. This design affords respondents multiple reasons to justify their choice and hence reduces their concern over sensitive items such as political connections.

A Conjoint Experiment

The main objective of the experiment is to test the relative importance of three factors in elite recruitment, namely a candidate's personal competence, loyalty to the regime, and political connections. The survey uses randomly generated profiles of hypothetical candidates, each consisting of seven personal characteristics. Figure 3.1 is an example of the design translated in English. (See Figure 3.6 in Appendix for the original version in Chinese.)

Figure 3.1: Design of Conjoint Table & Questions (English Translation)

	Candidate 1	**Candidate 2**
Award Won in College	Academic Excellence	Student Leadership
Father's Occupation	Government Official	Private Sector Worker
Prior Work Experience	No Experience	Government Job
Political Affiliation	CCP Member	CCP Member
College Attended	Elite University	General College
Gender	Female	Male
Education Level	Master Degree	Bachelor Degree

a. Which candidate are you more inclined to choose?

Candidate 1	Candidate 2

b. Do you think they are <u>suitable</u> and <u>qualified</u> for the civil service job?
Please rate each candidate respectively.
1 means completely unsuitable and unqualified; 5 means highly suitable and highly qualified.

	1	2	3	4	5
Candidate 1					
Candidate 2					

c. Please rate each candidate on <u>leadership quality</u> that he/she is likely to demonstrate on the job.
1 means no leadership quality; 5 means very high leadership quality.

	1	2	3	4	5
Candidate 1					
Candidate 2					

d. Please rate each candidate on <u>task implementation ability</u> that he/she is likely to demonstrate on the job.
1 means no task implementation ability; 5 means very high task implementation ability.

	1	2	3	4	5
Candidate 1					
Candidate 2					

The survey begins with a scenario description that puts the respondent in the position of a government official who is interviewing candidates on behalf of his or her work unit.

> **Scenario Question**: The government department you work in plans to recruit one entry-level civil servant via the NCSE this year. On behalf of your department, you are interviewing the five finalists who have passed the written test. Assume that the two following candidates perform equally well during the interview. Based on their additional personal information provided below, which candidate are you more inclined to choose?

Following the description, the respondent is presented with a pair of candidate profiles. Every profile includes seven *attributes*, each providing an important piece of information about the candidate. Each attribute in turn is varied into several *values* that distinguish candidates from one another. In total, all attribute values generate about 1,000 unique candidate profiles. The row positions of the seven attributes in the table are randomized to limit possible row-specific effects, but they are held constant for each respondent to reduce cognitive difficulty.

While there are many factors that could potentially influence a candidate's chance of selection, I incorporate only seven attributes (summarized in Table 3.1) for theoretical consideration and practical concerns. To render the survey as close to reality as possible, only information that is usually available to NCSE interviewers is presented.[2] A detailed description of each attribute and the rationale for its inclusion can be found in Appendix A. In summary, four attributes contain values that signal competence relative to their respective reference categories; two attributes contain values that indicate loyalty to the regime; another attribute, father's occupation, contains the value *government official* to signal a

[2]Availability of information on candidates' political connections depends on whether, and what kind of, institutional rules are put in place to filter out such information. This varies by province, as each province is responsible of administering NCSE within its jurisdiction. However, it is not uncommon for interviewers to learn about such information.

Table 3.1: Attributes & Values Used in Candidate Profiles

Attributes	Values	Original Chinese Text
Gender	Female	女
	Male	男
Political Affiliation	None	群众
	CCP Member†	中共党员
College Attended	General College	普通地方院校
	Elite University*	985重点高校
Education Level	Bachelor Degree	大学本科
	Master Degree*	硕士研究生
Award Won in College	No Award	无
	Artistic Talent	校园文艺之星
	Community Outreach*†	社会实践先进个人
	Academic Excellence*	学习标兵
	Student Leadership*†	优秀学生干部
Prior Work Experience	No Experience	无(应届毕业生)
	Company Job	普通公司工作
	Government Job*	基层行政工作
Father's Occupation	Private Sector Worker	私企普通员工
	SOE Worker (CCP Member)	国企普通职工(党员)
	Private Entrepreneur	企业家
	Government Official	政府官员

Note: The first value in each attribute is taken as the reference category in the analysis. An attribute value with an asterisk * indicates that it is a signal of competence relative to the reference category; an attribute value with a dagger symbol † indicates that it is a signal of loyalty relative to the reference category.

candidate's political connections. While political connections can take many forms, I choose the most direct one, i.e. that by kinship, so that respondents would not miss the information. Two additional values, i.e. *SOE worker (CCP member)* and *private entrepreneur*, are included in father's occupation as placebos to test possible causal mechanisms of political connections.

Following the conjoint table, the survey asks a series of questions to measure the outcomes of interest. The first question asks the respondent to choose the preferred candidate to recruit (i.e. a choice-based question), followed by another question that asks the respondent to rate each candidate in terms of being "suitable and qualified" for the job on a scale of 1-5 (i.e. a rating-based question). In addition, the respondent is asked to rate each candidate on "leadership quality" and "task implementation ability," both of which are important competence qualities valued in a civil servant. Task implementation is arguably the most relevant and desirable quality in an *entry-level* civil servant, as his or her main job description is to perform tasks delegated by superiors.

Each respondent is presented with five pairs of profiles and repeats the tasks for each pair. At the end of the survey, the respondent is asked a series of personal information questions.

Based on the survey design, I simultaneously test three main hypotheses as follows.

> *H1: Individual attributes that signal personal competence increase a candidate's probability of being selected in NCSE.*
>
> *H2: Individual attributes that signal loyalty to the regime increase a candidate's probability of being selected in NCSE.*
>
> *H3: Individual attributes that signal political connections increase a candidate's probability of being selected in NCSE.*

In addition, I explore possible causal mechanisms through which political connections influence selection. This is important for understanding whether respondents value political

connections for meritocratic reasons or otherwise, i.e. it is plausible that they regard political connections as a signal of competence or loyalty. Alternatively, they may view political connections as a basis for patronage practice, either because connections constitute a currency for political transactions or they have a stronger psychological affinity for these candidates. Due to sensitivity of this topic, the hypotheses on political transactions and psychological affinity cannot be directly tested. Instead, I test the following three hypotheses.

> *H3.1: Candidates with political connections are more likely to be selected in NCSE because they are perceived to be more competent.*
>
> *H3.2: Candidates with political connections are more likely to be selected in NCSE because they are perceived to be more loyal to the regime.*
>
> *H3.3: Candidates with political connections are more likely to be selected in NCSE because they have stronger social networks.*

To test Hypothesis 3.1, I compare the effects of attribute value *government official* in father's occupation on the choice outcome and the rating outcomes. If offspring of government officials are simultaneously favored in selection and rated more highly for their competence qualities, it is likely that they are viewed as more competent than others.

To test Hypothesis 3.2, I compare the effect of a placebo value in father's occupation, *SOE worker (CCP member)*, with that of *government official* on the choice outcome. If offspring of government officials are perceived as more loyal to the regime, so should offspring of SOE workers who are also party members, as both types are likely to have been raised in a pro-regime family environment and influenced by parents' pro-regime sentiments.

Hypothesis 3.3 concerns the possibility that respondents view candidates' political connections as a source for rent-seeking outside government. To test it, I compare the effect of another placebo value in father's occupation, *private entrepreneur*, with that of *government official*. Since both occupations indicate that the candidate has a strong social network as

a result of his or her father's high social status,[3] both attribute values should have similar positive effects on selection, should this hypothesis be true.

If any of the three hypotheses are confirmed, we would have some conclusive evidence on *how* political connections influence NCSE recruitment. If, on the other hand, all three hypotheses are rejected, it would at least move us closer to the real causal mechanism(s) by way of elimination. In other words, it would increase the likelihood that political connections are valued because they allow elites to engage in patronage practice.

3. Data Collection & Analysis

The survey was implemented between August and November of 2015 in China. In order to collect data from a sample as representative of the actual decision-making body as possible, only government officials were recruited as respondents.

To reach as many government officials as possible, the survey was implemented both online and offline. Both versions had the same layout and design. The online survey was disseminated to known government officials via social networking applications. A total of 113 completed responses were returned. The offline survey was implemented using paper questionnaire. To account for possible regional heterogeneity, the survey was conducted in five cities in different parts of China. The range of cities selected covers both the coast and inland, north and south, and account for variation in economic development and administrative rank. Questionnaires were administered in classrooms of cadre training workshops and Master of Public Administration (MPA) programs in local universities, both of which were attended by government officials exclusively. Admittedly, sampling among attendees of these programs is not random. However, government officials who attend these programs are usually occupants of leadership positions or hopefuls for political promotion; they are hence more likely to be representative of actual NCSE interviewers. The offline implementation

[3]The original Chinese text for "private entrepreneur" is *qiyejia*, which has a positive connotation and suggests that the person is highly successful and well-respected.

returned 219 completed responses.

In total, 332 valid responses were collected. Though not a probability sample, it is roughly representative of the Chinese civil service in terms of observed demographic characteristics (Table 3.2). In particular, the sample has a good portion of respondents who have experience with political selection: 39.6% of the respondents either hold leadership positions or have actual experience of interviewing candidates in NCSE, and 49.0% of the respondents hold bureaucratic ranks of deputy section chief or higher. These statistics indicate that about half of the respondents in the sample are political elites who are entrusted with the authority to make personnel decisions. This adds external validity to the study. Furthermore, the online and offline portions of the sample exhibit similar respondent characteristics (see Table 3.3 in Appendix). Since each respondent was asked to evaluate five pairs of candidate profiles (i.e. 10 profiles per respondent), a total of 3,320 observations were collected for analysis.[4]

Table 3.2: Conjoint Experiment: Respondent Characteristics

	N	Mean	S.D.	Min	Max
Male	332	.578	.494	0	1
Age	314	35.4	9.63	22	59
CCP Membership	332	.816	.387	0	1
Bureaucratic Rank	323	2.01	1.33	1	6
Leadership Position	329	.299	.458	0	1
Interviewer Experience	329	.222	.416	0	1

According to Hainmueller, Hopkins and Yamamoto (2014), a fully randomized conjoint analysis *nonparametrically* identifies the average marginal component effect (AMCE) for each of the attribute values on the probability of a profile being chosen. By using respondents' observed choice responses as the basis of inference, conjoint analysis is able to estimate the causal effects of many treatment components simultaneously and without resorting to functional form assumptions.

[4]More details on survey implementation and data description are presented in the Appendix.

I estimate the AMCE of each attribute value using a regression-based estimator. With attribute values randomized independently from one another, the ordinary least squares (OLS) regression produces unbiased and consistent estimates of AMCEs. The data is fit using the following linear model,

$$Y_{ijk} = \beta_0 + \sum_{l=1}^{7} \sum_{d=2}^{D_l} \beta_{ld} X_{ldijk} + \epsilon_{ijk} \tag{3.1}$$

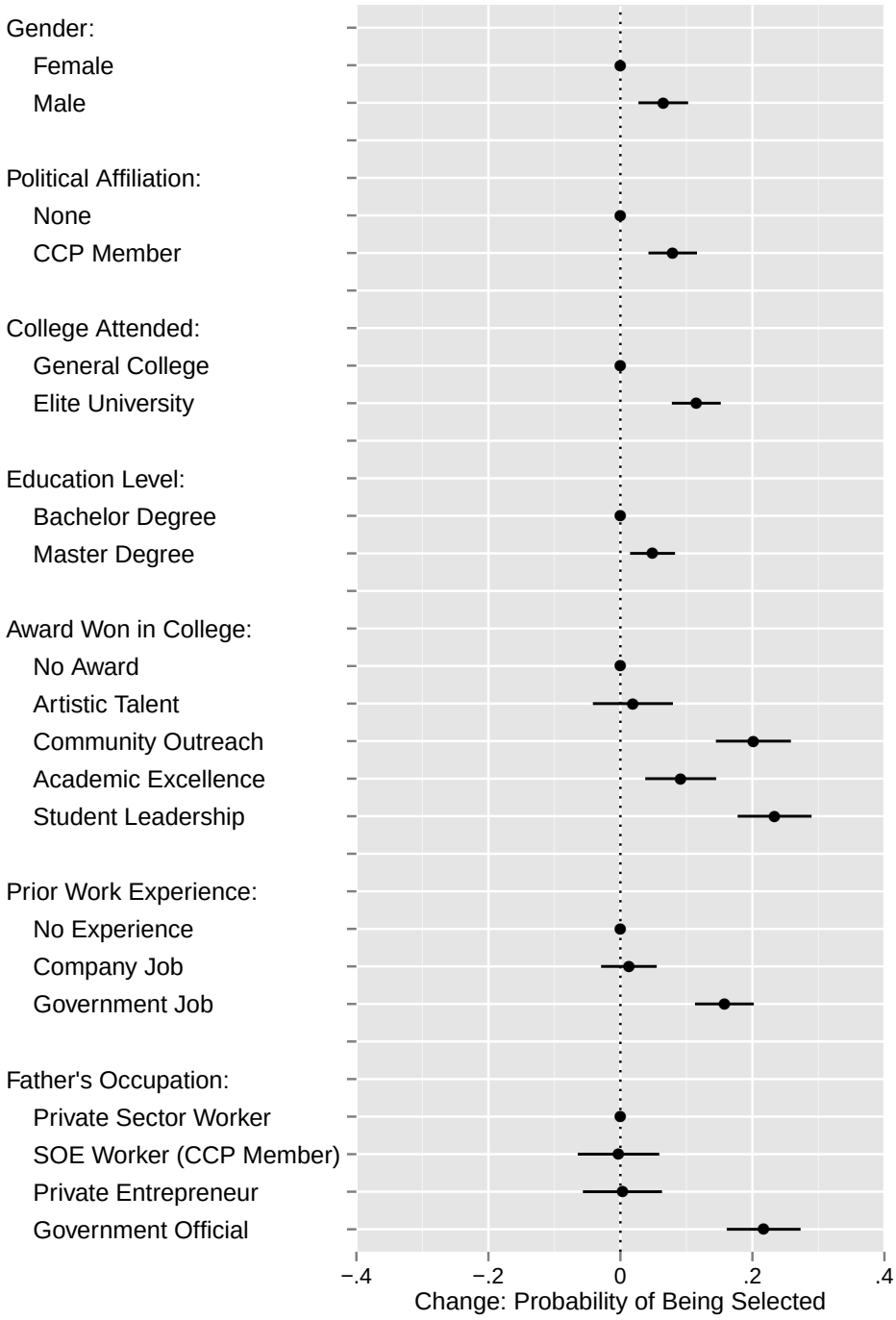
where $Y_{ijk} \in \{0, 1\}$ is the binary outcome variable indicating whether profile j in task k of respondent i is chosen, X_{ldijk} is the dummy variable for the dth value of attribute l, β_{ld} is the corresponding coefficient, and ϵ_{ijk} is the error term, which is statistically independent of the regressors due to randomization of attributes. Note that the seven attributes are indexed by $l \in \{1, 2, .., 7\}$ and the values in each attribute l are indexed by $d \in \{1, ..., D_l\}$. The OLS estimate of β_{ld} is thus the estimate of AMCE for the dth value of attribute l, with White cluster-corrected standard errors to account for within-respondent correlation of preferences. The same approach is used in analyzing rating-based responses, where the outcomes of interest are continuous instead of binary.

4. Main Results

Rivaling Effects of Divergent Preferences

Results on the primary outcome of interest, candidate choice, are reported in Figure 3.2, which displays the estimated AMCEs on the probability of being selected. At least one value in each attribute has a significant effect relative to the reference category.

Figure 3.2: Effects of Candidate Attributes on Probability of Selection



Note: This plot shows the estimated AMCEs of attribute values on a candidate's probability of being selected for the civil service job. The outcome is a dichotomous variable coded "1" for being selected and "0" for not being selected. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Among them, attribute values signaling competence exclusively all have significant positive effects, including *elite university* in college attended (11.5%), *master degree* in education level (4.87%), *academic excellence* in award won in college (9.14%), and *government job* in prior work experience (15.8%). They show that competence – either in the form of intellectual capacity or human capital accumulation – is highly valued in political recruitment.

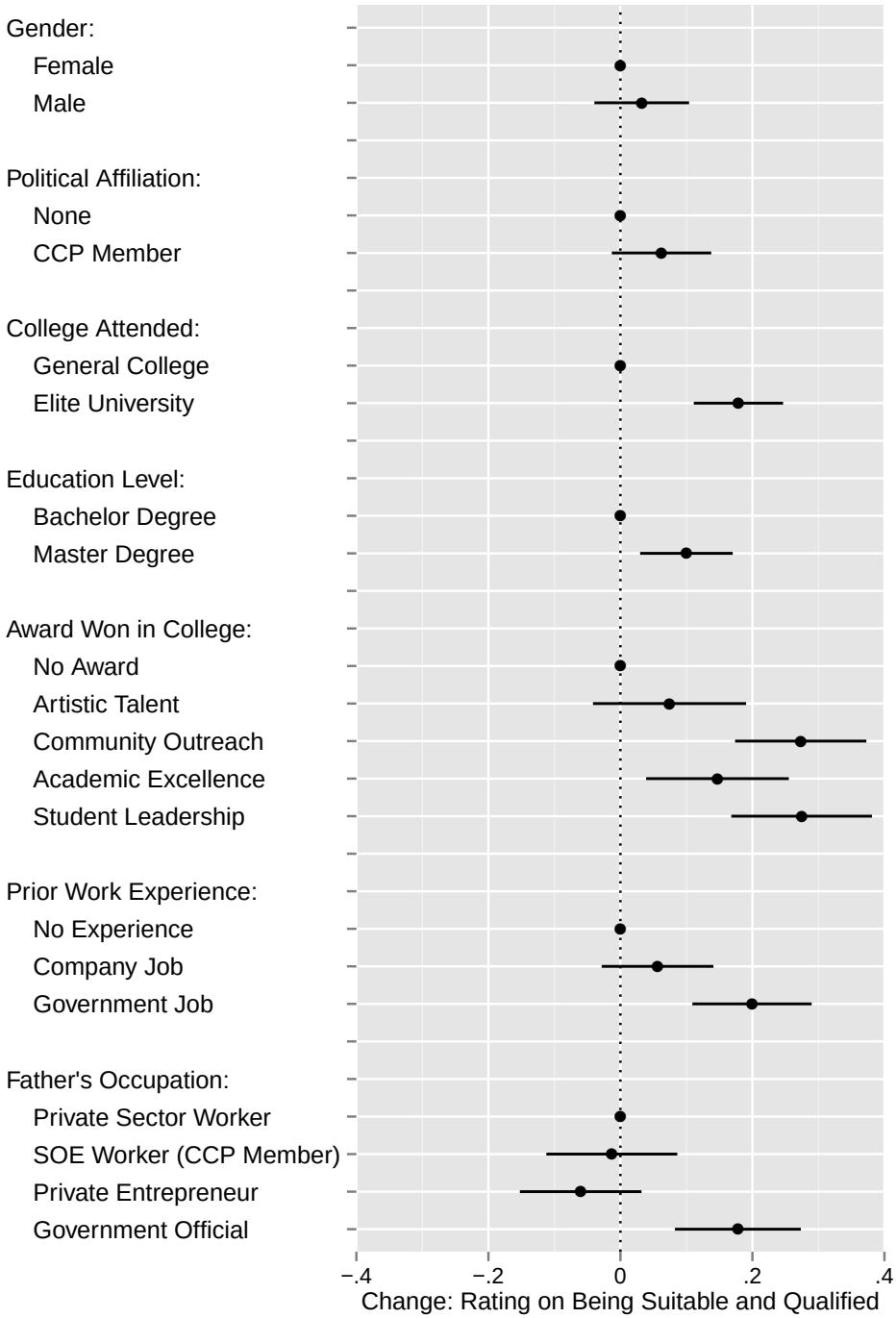
Similarly, attribute values signaling loyalty to the regime also have significant positive effects, including *CCP member* in political affiliation (7.93%), *community outreach* (20.1%) and *student leadership* (23.4%) in award won in college. They show that, being politically loyal or demonstrating a willingness to be co-opted by the regime increases a candidate's chance of selection.

For political connections, we look at *government official* in father's occupation. Not only does it increase a candidate's probability of selection by 21.7%, its effect magnitude is the second largest among all, only next to that of *student leadership* in award won in college, which is a compounded signal of both competence and loyalty.

The findings on candidate choice provide strong evidence in support of the three main hypotheses. On the one hand, local officials do follow the meritocratic principle that champions competence and loyalty; on the other hand, they allow other factors such as political connections to influence their decisions.

To check whether these findings are robust, I look at the rating outcomes in the next question. If government officials are consistent in their judgment, they should rate the candidate of choice in each pair more highly than the other one. Moreover, by not forcing respondents to pick a winner in each pair, the rating-based question reflects their attitude towards each attribute value more accurately. Figure 3.3 presents the estimated AMCEs on a candidate's rating for being "suitable and qualified" for the job. The results are very similar to that of the choice-based question and provide further evidence to support the three main hypotheses (see Table 3.5 in Appendix for detailed reporting on the estimates).

Figure 3.3: Effects of Candidate Attributes on Rating of Being "Suitable & Qualified"



Note: This plot shows the estimated AMCEs of attribute values on a candidate's rating of being "suitable and qualified" for the civil service job. The outcome is a continuous variable on a scale of 1-5. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Amid the overall consistent results, a few things stand out. While male candidates are clearly preferred when a choice must be made, they are not considered more suitable or qualified than their female counterparts. It is also the case for CCP members when compared to non-members. The discrepancies between choice and rating suggest that selection is not purely meritocratic; local elites' idiosyncratic tastes also influence their decisions.

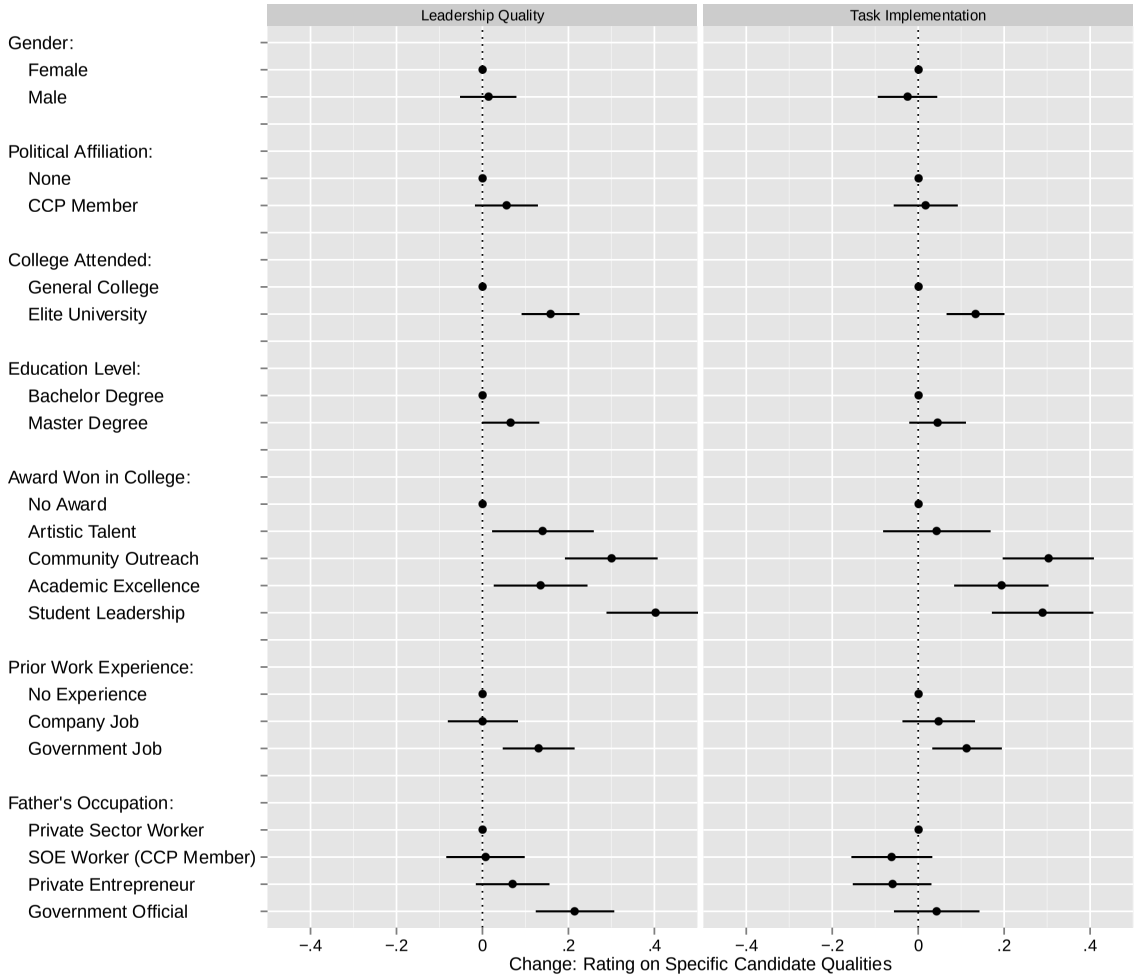
The AMCE estimates for *government official* in father's occupation on both choice and rating outcomes are similarly large (21.7% and 17.8%, respectively), indicating that elites consistently prefer candidates with political connections. In the next section, I explore possible mechanisms through which candidates' political connections contribute to their advantage in selection. Specifically, I present an analysis on whether political connections serve as an informational cue for candidates' competence or loyalty.

Political Connections: Exploring Causal Mechanisms

Based on the survey design, I test three hypotheses on possible causal mechanisms of political connections. First, to examine whether candidates with political connections are perceived as more competent, I analyze two additional rating questions on specific competence qualities: 1) leadership quality and 2) task implementation ability. Figure 3.4 presents the results; the patterns of estimated AMCEs are largely consistent with previous results.

A closer look at the estimates for *government official* in father's occupation, however, reveals that candidates with political connections are *not* rated more highly for task implementation (see panel on the right). Although they are perceived as possessing more leadership quality (see panel on the left), these results do not provide conclusive evidence that politically connected candidates are regarded as more competent, especially for entry-level positions where the job scope consists largely of task implementation.

Figure 3.4: Effects of Candidate Attributes on Ratings of Specific Competence Qualities



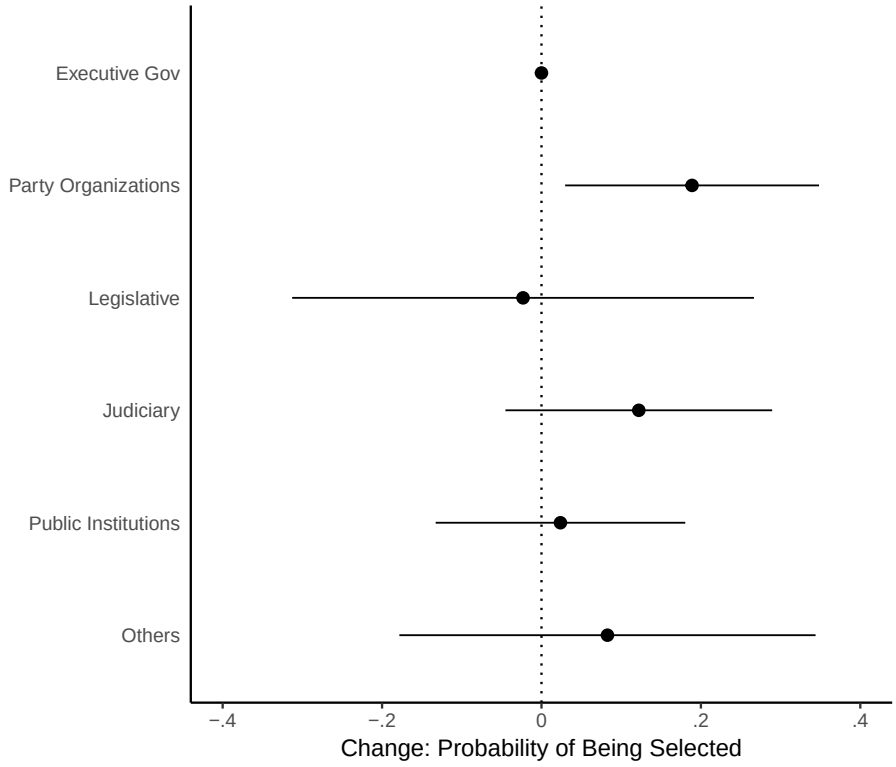
Note: This plot shows the estimated AMCEs of attribute values on a candidate's ratings of specific competence qualities. The panel on the left reports estimated AMCEs on a candidate's "leadership quality"; the panel on the right reports estimated AMCEs on a candidate's "task implementation" ability. Both outcome variables are continuous on a scale of 1-5. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Next, I go back to Figure 3.2 to compare the AMCE estimate of *government official* to that of two placebo values in father's occupation, namely *SOE worker (CCP member)* and *private entrepreneur*. Neither placebo has a significant effect on candidate choice, which leads us to reject the hypotheses that politically connected candidates are favored because they are perceived to be more loyal or because they have stronger social networks outside the government.

Although the rejection of hypotheses 3.1-3.3 does not provide conclusive evidence on the causal mechanism(s) of political connections, it does provide some important information. Rejection of hypotheses 3.1 and 3.2, in particular, indicates that political connections do not function as a cue for candidates' competence or loyalty; government officials are not thinking of the meritocratic principle when they consider candidates' political connections.

Furthermore, rejection of these hypotheses helps to narrow the range of possible causal mechanisms. It is more likely that political connections influence selection because elites are motivated by political transactions or by psychological affinity, both of which could facilitate patronage practice. In fact, by adding an interaction effect of *government official* in candidate's father's occupation with respondent's work unit (see Figure 3.5), the analysis shows that, while the effect of political connections is significant across all branches of government, it is particularly pronounced in party organizations (45.1%). Since party organizations are the political power centers at each level of government, local elites in these workplaces are in better position to use recruitment as patronage to pursue material gains or cultivate personal loyalty in candidates. However, this is only exploratory evidence.

Figure 3.5: Interaction Effects of Candidate's Political Connections with Respondent's Work Unit



Note: This plot shows the estimated average component interaction effects (ACIEs) of a candidate's political connections with a respondent's work unit on the candidate's probability of being selected for the civil service job. Estimates are based on an OLS model including all attribute values as well as an interaction term between a dichotomous variable for candidate's political connections (measured by *government official* in father's occupation) and respondent's work unit. Standard errors are clustered at the respondent level. Horizontal bars represent 95% confidence intervals.
The baseline estimate for the reference category, *executive government branch*, is denoted by a point without horizontal bars; it has a value of 0.262.

Robustness Checks

One indication that the results presented so far are robust is that the AMCE estimates across different outcomes exhibit similar patterns, which suggests that respondents' multidimensional preference is stable when evaluating candidates in various aspects. To ensure that the results are not driven by any particular respondent groups, I estimate the heterogeneous effects across several theoretically relevant subgroups, divided by gender, age, bureaucratic rank, and authority over personnel decision, respectively. The four panels in Figure 3.8 show that AMCE estimates for respondent subgroups are highly consistent, indicating that the effects are not sensitive to particular respondent characteristics. It also means that there is wide consensus among local officials regarding preference in elite recruitment.

To examine different ways of addressing the clustering of profiles by respondents, I replicate the analysis on candidate choice while adding respondent fixed effects and respondent random effects (Figure 3.9. The results are nearly identical to the benchmark model.

Moreover, given that the sample comprises online and offline respondents who were recruited using different methods, I estimate the AMCEs for these two groups separately, which again are highly consistent with the main results (Figure 3.10). Estimates for the online group have slightly larger 95% confidence intervals due to smaller sample size.

Lastly, I perform diagnostic tests on some of the assumptions entailed by the conjoint design, including no carry-over effects and no profile-order effects, by estimating AMCEs by task number and by profile position separately. Figure 3.11 and Figure 3.12 show that the results do not differ significantly, thus further validating these assumptions.[5]

[5]Amid the highly consistence results in Figure A6, AMCE estimates for Pair 1 are more subdued than that for the other pairs. This is likely caused by respondents' lack of familiarity with survey questions at the beginning rather than any carry-over effects. As respondents proceed to evaluate subsequent pairs of profiles, they become more familiar with the tasks and, as a result, their preference more stabilized.

5. Concluding Remarks

This chapter focuses on the dynamic between the CCP leadership and local government officials in the implementation of elite recruitment. While the goal of the leadership is to recruit individuals who are competent and ideologically loyal to the regime, I show that local officials have divergent preference when choosing candidates. Employing a conjoint experiment, I find that local officials clearly favor candidates with political connections, although they do not consider these candidates to be more competent or loyal. It indicates that local officials are motivated by private considerations such as patronage when they are in charge of elite recruitment. If unchecked, their behavior would undermine the meritocratic principle in NCSE and weaken upward mobility opportunity for non-elites.

Appendix

In the appendix, I provide detailed information on the conjoint experiment discussed in Chapter 4, including the experiment design, details of survey implementation, description of data collection, as well as additional tables and figures referenced in the chapter.

1. Experiment Design: Attributes and Values

In the conjoint experiment, seven attributes are incorporated to constitute a hypothetical NCSE candidate profile, and each attribute is varied into several values. The attributes and values are designed to test the three preference dimensions of interest, namely personal competence, loyalty to the regime, and political connections. Below, I provide a description of each attribute and its values, as well as the rationale for including it in the conjoint table.

1. **Gender**: The two values of this attribute are *male* and *female*. Given the unequal gender representation in the Chinese government, especially among leaders of all levels, there is reason to believe that government officials take gender into account when recruiting new civil servants. I do not, however, consider gender a signal of competence, loyalty or political connections. This attribute is also included to make the hypothetical profiles more realistic for respondents.

2. **Political Affiliation**: The two values in this attribute are *none* and *CCP member*. Since the 1990s, the CCP has made an effort to recruit more college students into the party; membership has become less competitive and more common on university campuses. The question of whether to join the CCP, therefore, is now largely a choice for college students, especially those in elite universities. Those who are more supportive of the regime or contemplate a career in the government are more likely to become party members. Relative to *none*, *CCP member* is thus a signal of loyalty to the regime.

3. **College Attended**: The two values in this attribute are *elite university* and *general college*. College admission in China is strictly based on student performance in a national examination that is offered only once a year to high school graduates. The system of admission provides a singular incentive to all students, which is to study hard and do well academically. The admission scores for elite universities are substantially higher than that for general colleges, thus separating students of higher aptitude from the rest.[6] The type of college attended by a candidate is therefore a reliable indicator of his or her academic merit and ability to learn on a new job. Relative to *general college*, *elite university* a clear signal of competence.

4. **Education Level**: The two values in this attribute are *bachelor degree* and *master degree*. According to the eligibility requirements, all NCSE candidates must be college educated, which means that any candidate has at least a bachelor degree.[7] Compared to candidates with a bachelor degree, those who have obtained a graduate degree are more specialized in their fields of studies and tend to bring more expertise to the job. In fact, in recent years, a graduate degree has become a requisite for promotion at many government leadership positions.[8] Through the accumulation of human capital, *master degree* signals competence when compared to *bachelor degree*.

5. **Award Won in College**: This attribute has five values, including *no award*, *artistic talent*, *community outreach*, *academic excellence*, and *student leadership*. College students in China compete for various awards while in school. Some of the awards are common in most universities and their selection criteria nearly universal. As a result,

[6]The original wording for "elite university" in Chinese used in the survey is *"985 Project" Key University*, which is a list of 39 higher education institutions - arguably the most prestigious in China - out of some 2,500 universities in total nationwide. For more details on Chinese universities, please see http://edu.people.com.cn/n/2015/0528/c244541-27071607.html (accessed December 29, 2016).

[7]There are candidates with doctorate degrees applying to join the civil service. Given the small number, however, doctoral degree is not included as an attribute value.

[8]It should be noted that, although many leadership positions are now only open to contenders with graduate degrees, since civil servants often have the option of doing a part-time graduate program while on the job, it is not absolutely imperative that they first enter the civil service with a graduate degree.

they are viewed as reliable signals of certain qualities of the recipients when compared to those who have received none.

Artistic talent is an award for students who are active on the cultural or arts scene on campus. Recipients of this award generally possess good inter-personal skills that could be useful on a civil service job. They are, however, not necessarily more competent for government jobs or more loyal to the regime. This award category is included as a placebo to test if survey respondents respond to *any* award category even when it does not reflect any of their preference dimensions.

Community outreach is an award for students who excel in activities that have broader social impact beyond the university campus. Participants in these activities gain hands-on experience and develop skills for problem solving. Recipients of this award typically include students who are involved in community service programs or apply their classroom knowledge to real-world problem solving, and they are generally considered to be more competent. Moreover, many community outreach programs on campus – especially those that are more likely to be recognized with an award – are sponsored by the university under the guidance of the CCP committee and the Chinese Communist Youth League (CCYL). These programs are part of the party's effort to co-opt social activism among students. Students who choose to participate in these programs demonstrate a higher degree of willingness to work within the current social and political framework than those who choose to launch their independent initiatives. This award, therefore, signals loyalty as well as competence.

Academic excellence is awarded to students who perform exceptionally in academic work. Since academic merit is an indicator of intellectual capacity and learning ability, this award signals competence.

Student leadership is awarded to students who have rendered excellent service in their capacity as student leaders on campus. Recipients are usually leaders of student

union or the CCYL in the university, who not only display outstanding leadership quality in their service but also assist the university in managing student affairs under the guidance of the CCP committee. This award is thus a signal of both competence and loyalty.

6. **Prior Work Experience**: The three values in this attribute are *no experience*, *company job*, and *government job*. Work experience generally represents human capital accumulation where an individual develops professional skills. *Government job* is hence a signal of competence. To the extent that skills are heterogeneous and not always transferable, work experience at a *company job* does not necessarily signal competence for a civil service job; it is included as a placebo as well as to make the survey more realistic for respondents.

7. **Father's Occupation**: Unlike the previous six attributes that represent some *intrinsic qualities* of a candidate (i.e. competence and/or loyalty), this attribute is intended to reflect a candidate's political connections as a result of his or her family background. Kinship ties is possibly among the strongest kinds of personal connection; having kinship ties to political insiders is hence a clear signal of political connections. The four values included are *private sector worker*, *SOE worker (CCP member)*, *private entrepreneur*, and *government official*.

   Government official is a strong signal of political connections, relative to the reference category *private sector worker*. Having a father who is a government official clearly indicates that the candidate is connected to the political elite class.

   In addition, two other values, *SOE worker (CCP) member* and *private entrepreneur*, are included as placebos to test possible causal mechanisms of political connections on NCSE recruitment. If political connections serve as a cue of a candidate's loyalty to the regime, we would expect *SOE worker (CCP) member* to have similar functions. If

political connections influence selection because of the strong social networks possessed by the candidate, we would expect *private entrepreneur* to have similar effect as well.

2. Survey Implementation

The conjoint survey experiment was approved by the Columbia University Institutional Review Board under protocol IRB-AAAP6302. It was implemented between August and November in 2015. The survey was administered both online and offline, using different methodologies. The content and layout of the survey was kept consistent in both forms. Figure 3.6 shows an example of the survey design in the original Chinese language.

2.1 Online Administration

The online survey was hosted on www.qualtrics.com. A short URL to the survey was created to be shared via the Chinese mobile application WeChat. To disseminate the survey, the author's professional and personal contacts who are known government officials were contacted and asked to participate in the survey on their mobile phones. In addition, they were asked to share the survey *exclusively* with their colleagues at work and invite them to take the survey. As a measure to ensure that all respondents to the online survey were government employees, the author's contacts were specifically asked *not* to disseminate the survey further via their colleagues. The online survey was also sent to the author's professional contacts who are journalists and university researchers to be shared with their contacts and friends who are government officials.

Figure 3.6: Design of Conjoint Table & Questions (Original Version in Chinese)

情景题

您所在的工作单位今年计划通过公务员考试招录一名新人，派您代表单位作为考官，面试考核已经通过笔试的五名候选人。

假如两名候选人在面试中的表现同样出色，综合以下的个人情况，您更倾向挑选谁？共五组。请在适合的选项上打钩（√）。

请详细阅读并认真考虑后再作答。

第一组

	考生 1	**考生 2**
在校荣誉	学习标兵	优秀学生干部
父亲职业	政府官员	私企普通员工
基层经验	无 (应届毕业生)	基层行政工作
政治面貌	中共党员	中共党员
毕业院校	985 重点高校	普通地方院校
性别	女	男
教育程度	硕士研究生	大学本科

1a. 您更倾向挑选谁？

考生 1	考生 2

1b. 您是否认为上述两名考生**适合**并**胜任**公务员工作？

请为他们打分。1 代表完全不适合、不胜任；5 代表非常适合、非常胜任。

	1	2	3	4	5
考生 1					
考生 2					

1c. 请为他们在今后工作中的**领导力**打分。1 代表完全没能力；5 代表非常有能力。

	1	2	3	4	5
考生 1					
考生 2					

1d. 请为他们在今后工作中的**执行力**打分。1 代表完全没能力；5 代表非常有能力。

	1	2	3	4	5
考生 1					
考生 2					

The recruitment method for online survey subjects, as described above, was not a snowball approach. All respondents were either a known contact of the author or a known contact of the author's contact. This approach was adopted as a way to make sure that all potential respondents were verifiable government employees. As an additional measure, the survey included in its demographic background section one question that asked the respondent to report the nature of his or her workplace. Employees of non-government sectors were subsequently removed from the sample.

The recruitment method for online survey subjects, as described above, was not a snowball approach. All respondents were either a known contact of the author or a known contact of the author's contact. This approach was adopted as a way to make sure that all potential respondents were verifiable government employees. As an additional measure, the survey included in its demographic background section one question that asked the respondent to report the nature of his or her workplace. Employees of non-government sectors were subsequently removed from the sample.

In total, 121 online responses were returned, of which eight were incomplete. Among them, 7 responses were blank, indicating that they may have been created by accident (e.g. clicking on the URL by mistake or unintentional duplicates); only one response was half filled, suggesting that the respondent decided to leave the survey halfway. The attrition rate (i.e. one out of over a hundred), therefore, is low. The eight incomplete responses were subsequently removed, leaving 113 valid online responses for analysis.

2.2 Offline Administration

The conjoint survey was also implemented offline using paper questionnaires. The survey was administered in five cities in China.[9] Recruitment of survey respondents took advantage of the fact that local universities in these cities regularly hosted cadre training workshops and/or Master of Public Administration (MPA) programs that were attended by government

[9]To protect the human subjects in the experiment, the names of the cities are not disclosed.

officials *exclusively*.

Professors teaching these workshops and programs were contacted in advance with a request to conduct the survey in their classes. Permissions were granted after each professor had learned the content and purpose of the survey. The classroom setting offered an opportunity to access a large number of government officials at once. In addition, respondents appeared to be more relaxed than they otherwise would be in a work setting.

Implementation of the survey in each classroom typically took about 15 to 20 minutes, usually during the break time of a class. Each respondent filled out his or her survey questionnaire independently and returned it to the numerator. Out of all students in these classes, only three declined to participate; the rest were cooperative. Some respondents left unprompted, hand-written remarks on the paper questionnaires that discussed their preference and decision-making when choosing candidates, and a few others approached the numerator afterwards to share their thoughts. This is evidence that respondents were candid and willing to express their opinion during the survey. In total, 219 valid responses were collected from offline survey implementation.

3. Data Description

Since the survey was not conducted using a probability sample, a detailed description of the data is necessary to determine whether, and to what degree, the experiment has any external validity.

3.1 Geographical Representation

Roughly two thirds of the responses are from the offline portion of the sample, which was collected from five cities in China. Although the cities were not selected at random, together they exhibit a considerable degree of heterogeneity in terms of a geographical location, political stature, administrative rank, and level of economic development.

- **Geographical location**: Among the five cities, two are inland and three are coastal.

Each city is located in a different province or municipality.

- **Political stature/administrative rank**: All five cities are large urban centers in China, but there is some variation in terms of their rank and political importance. One of the cities is a province-level municipality; two are provincial capitals that enjoy a sub-provincial rank; the fourth city is the largest in the province and also enjoys a sub-provincial rank; and the fifth city is an important economic power house in the province and has a prefectural rank.

- **Economic development**: Although none of the five cities are located in the undeveloped area in China, they vary considerably in terms of level of economic development. The provinces where they each are located are ranked between the 2nd and 14th among all 31 provinces in terms of GDP per capita in 2015.

The online portion of the sample covers more localities in China. By matching respondents' IP addresses to geo-locations, it is found that 30 cities in 16 provinces are represented. As shown in Figure 3.7, the survey sites – both online and offline – are spread all over the country and there is significant degree of variation in terms of geographical location, administrative rank and level of economic development. To the extent that government officials are heterogeneous across the types of cities they work in, the sample collected here accounts for that heterogeneity. The results in this survey should thus bear external validity beyond the respondents themselves.

Figure 3.7: Cities Represented in Survey

Note: This map shows the geographical locations where the survey experiment was implemented. To protect the human subjects of the survey, the names of the cities are not disclosed, nor are they identified as online or offline survey sites.

3.2 Respondent Characteristics

Due to the different recruitment methods used in online and offline implementation, it is imperative to check if the two groups of respondents in the sample exhibit similar demographic characteristics. In juxtaposition, it is found that the online group is slightly older and more senior in rank and leadership position than the offline group (see Table 3.3). This is expected, as MPA programs are mostly attended by younger government cadres who hope to advance their career by getting a postgraduate degree. The online implementation also targeted more senior government official.

One concern with the sample is that it may suffer from several unobserved selection biases. One possible selection bias is that government officials who agreed to participate in the survey might be different from those who declined. Though there is no way to formally test for this bias, the low attrition rate in both online and offline implementation, as discussed earlier, gives some confidence regarding the representativeness of the sample. Another possible bias is that government officials who attend cadre training workshops and MPA programs might be different from those who do not. This concern is warranted, but it should be noted that only government officials of a certain rank or above are eligible to attend cadre training workshops and that those enrolled in MPA programs are often hopeful of future promotions. In other words, these are government officials who are more likely to have authorities over personnel selection in their work units. Given that this study is interested in understanding how selection decisions are made by political elites in the government, this bias in the sample does not hurt the validity of the results.

Lastly, I check the balance of attribute values to make sure that randomization was done properly in this survey experiment. As shown in Table 3.4, not only are the attribute values evenly distributed across the sample, they are also balanced across respondent characteristics.

Table 3.3: Respondent Characteristics by Sample Subgroup

	N	Mean	S.D.	Min	Max
Offline Sample					
male	219	.539	.499	0	1
age	208	32.6	8.28	22	56
CCP membership	219	.827	.379	0	1
bureaucratic rank	215	1.53	.924	1	5
leadership position	216	.227	.419	0	1
interviewer experience	217	.198	.399	0	1
Online Sample					
male	113	.655	.476	0	1
male	106	41.0	9.70	22	59
CCP membership	113	.796	.403	0	1
bureaucratic rank	108	2.97	1.48	1	6
leadership position	112	.438	.496	0	1
interviewer experience	112	.268	.443	0	1

Table 3.4: Balance of Attribute Values

		Means of Respondent Characteristics					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Attributes Values	Obs.	male	age	CCP	rank	leader	interview
Gender							
Female	1,621	.587	35.4	.810	2.01	.297	.214
Male	1,699	.570	35.4	.822	2.01	.301	.230
Political Affiliation							
None	1,601	.573	35.6	.802	2.05	.307	.215
CCP Member	1,719	.583	35.2	.830	1.98	.291	.228
College Attended							
General College	1,694	.570	35.6	.817	2.02	.310	.212
Elite University	1,626	.587	35.1	.815	1.99	.287	.232
Education Level							
Bachelor Degree	1,640	.585	35.6	.815	2.01	.312	.226
Master Degree	1,680	.571	35.2	.817	2.01	.286	.217
Award Won in College							
No Award	690	.584	35.4	.799	1.98	.304	.234
Artistic Talent	651	.584	34.8	.796	2.03	.303	.208
Community Outreach	631	.597	35.8	.834	2.06	.309	.232
Academic Excellence	687	.568	36.0	.822	1.97	.287	.213
Student Leadership	661	.560	35.0	.832	2.01	.293	.223
Prior Work Experience							
No Experience	1,135	.583	35.4	.827	2.06	.311	.240
Company Job	1,111	.584	35.3	.815	1.98	.296	.210
Government Job	1,074	.567	35.5	.806	1.99	.288	.214
Father's Occupation							
Private Sector Worker	809	.583	35.4	.818	1.99	.296	.215
SOE Worker (CCP Member)	848	.575	35.8	.807	2.05	.316	.211
Private Entrepreneur	852	.588	35.7	.843	2.04	.307	.251
Government Official	811	.566	34.7	.797	1.95	.276	.209

Note: This table reports the number of observations for each candidate attribute value (column 1), as well as the means of respondent characteristics for each attribute value, including respondent's gender, age, CCP membership, bureaucratic rank, leadership position, and interviewer experience (columns 2-7). As shown, attributes are well balanced in the sample and across all respondent characteristics.

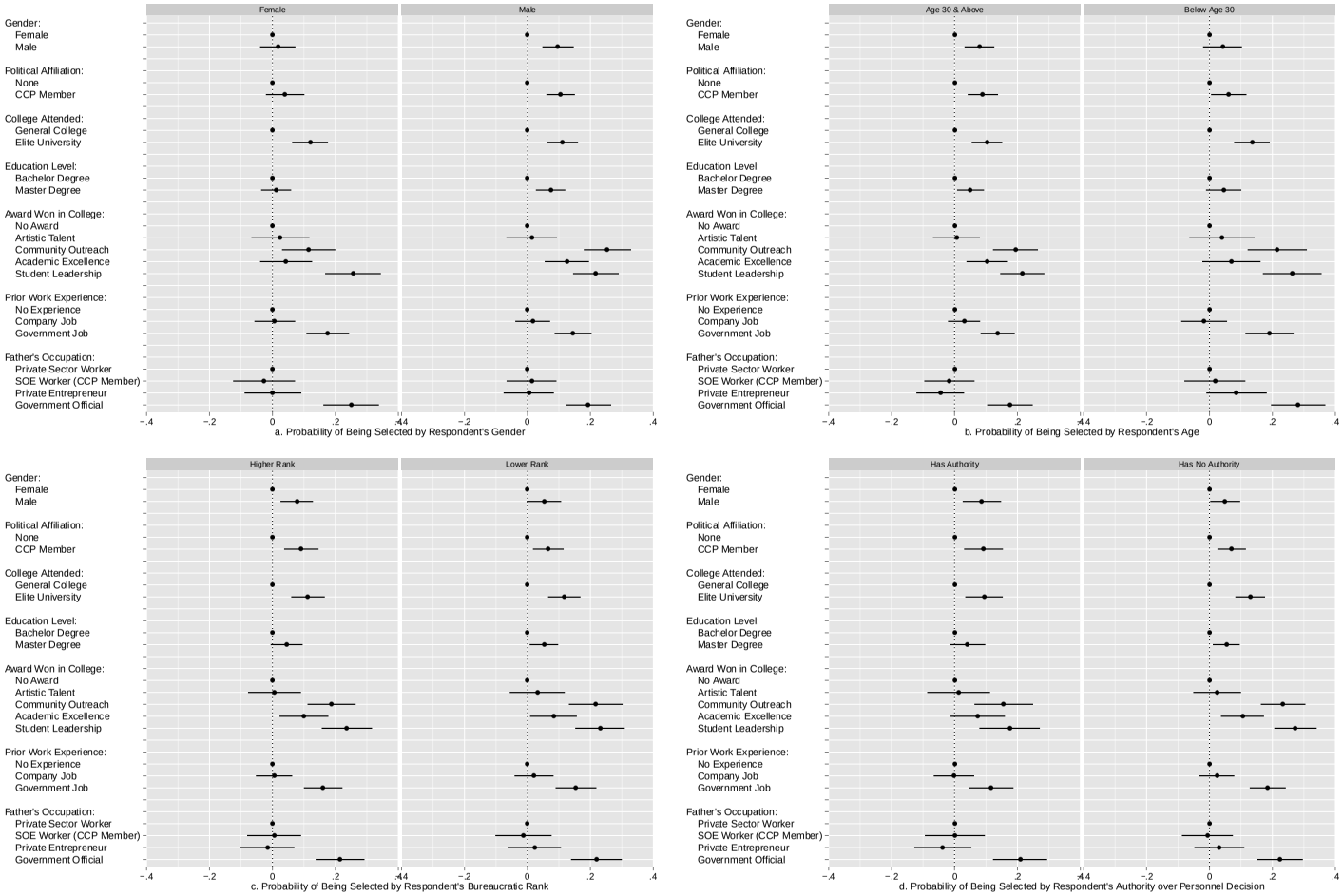
Table 3.5: Estimated AMCEs on Choice Outcome and Rating Outcome

	(1) Prob. of Being Selected		(2) "Suitable & Qualified"	
Gender				
Female	0		0	
Male	.0650	(.0192)***	.0323	(.0366)
Political Affiliation				
None	0		0	
CCP Member	.0793	(.0187)***	.0623	(.0384)
College Attended				
General College	0		0	
Elite University	.115	(.0189)***	.179	(.0345)***
Education Level				
Bachelor Degree	0		0	
Master Degree	.0487	(.0174)***	.100	(.0358)***
Award Won in College				
No Award	0		0	
Artistic Talent	.0189	(.0309)	.0744	(.0592)
Community Outreach	.201	(.0290)***	.273	(.0507)***
Academic Excellence	.0914	(.0274)***	.147	(.0552)***
Student Leadership	.234	(.0286)***	.275	(.0544)***
Prior Work Experience				
No Experience	0		0	
Company Job	.0129	(.0215)	.0563	(.0432)
Government Job	.158	(.0227)***	.199	(.0461)***
Father's Occupation				
Private Sector Worker	0		0	
SOE worker (CCP Member)	-.00290	(.0315)	-.0130	(.0506)
Private Entrepreneur	.00310	(.0306)	-.0602	(.0470)
Government Official	.217	(.0285)***	.178	(.0486)***
Obs.	2958		2813	

Note: Column (1) reports AMCE estimates on the probability of being selected for the civil service job (i.e. choice outcome); column (2) reports AMCE estimates on the rating of being "suitable and qualified" for the civil service job (i.e. a rating outcome). Estimates are based on the benchmark OLS model; standard errors clustered at the respondent level are shown in parentheses.

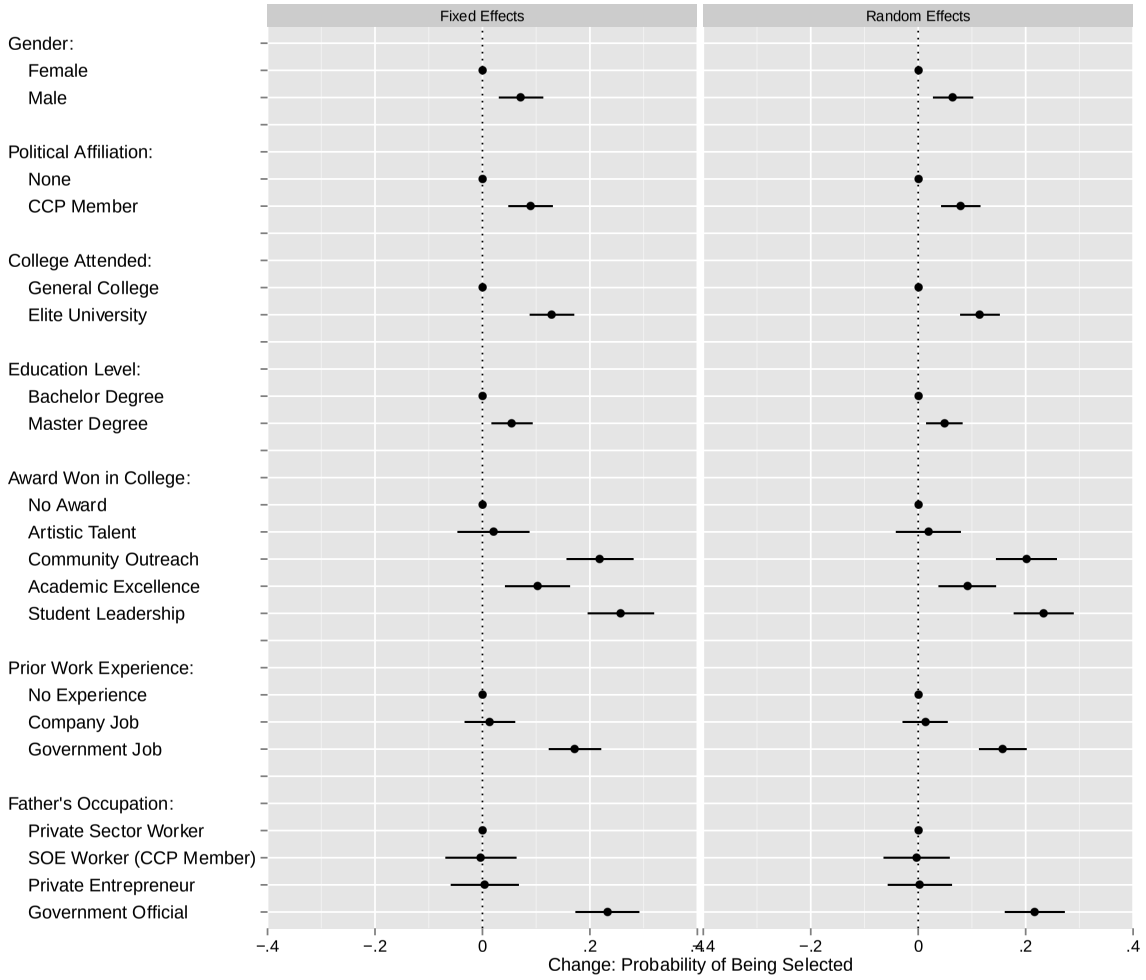
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 3.8: Heterogeneous Effects of Candidate Attributes on Probability of Selection



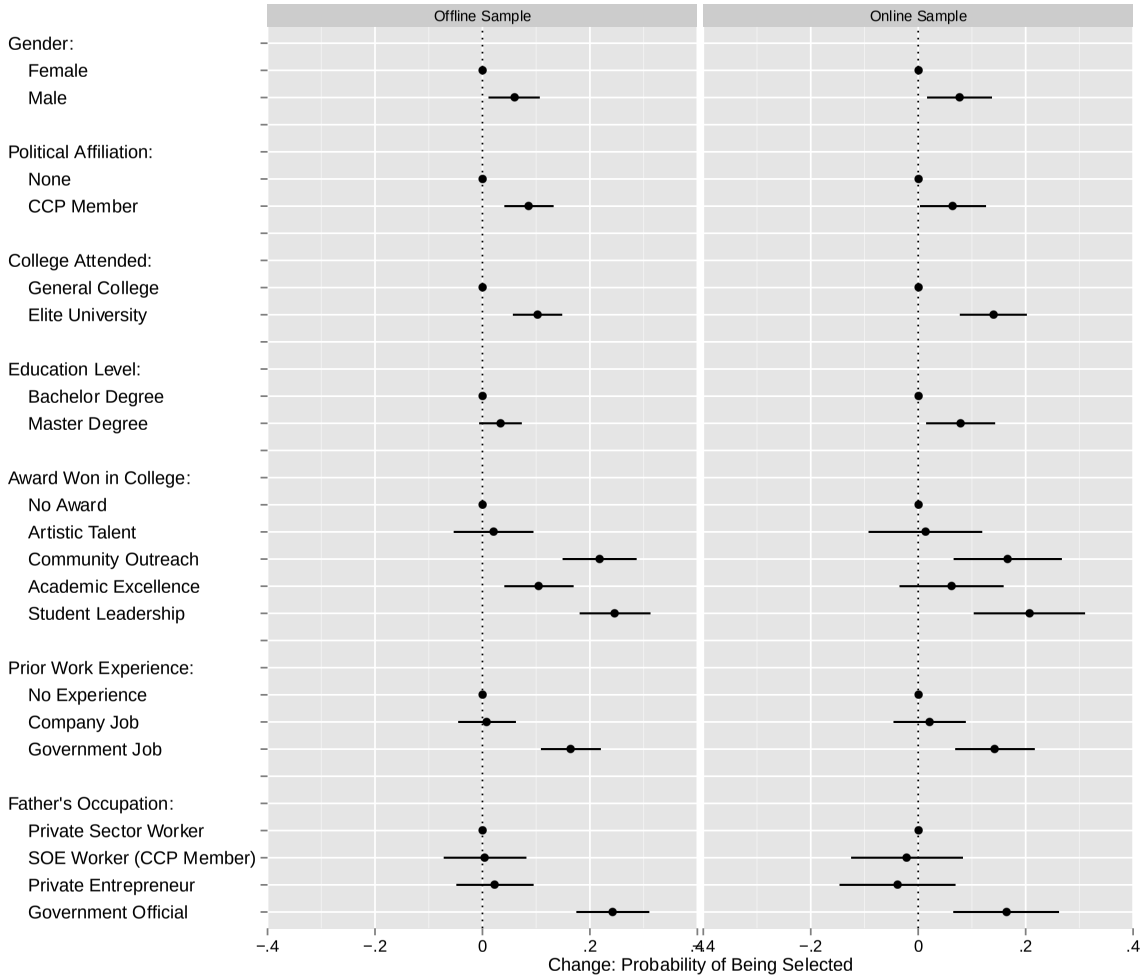
Note: These plots show the estimated AMCEs of attribute values on a candidate's probability of selection for various respondent subgroups. Panel (a) divides the sample by respondent's gender, panel (b) by respondent's age at 30, panel (c) by respondent's bureaucratic rank at deputy section chief (*fu ke ji*), and panel (d) by whether a respondent has authority over personnel decision (by either occupying a leadership position or having experience of being an NCSE interviewer). Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Figure 3.9: Effects of Candidate Attributes on Probability of Selection with Respondent FEs and REs



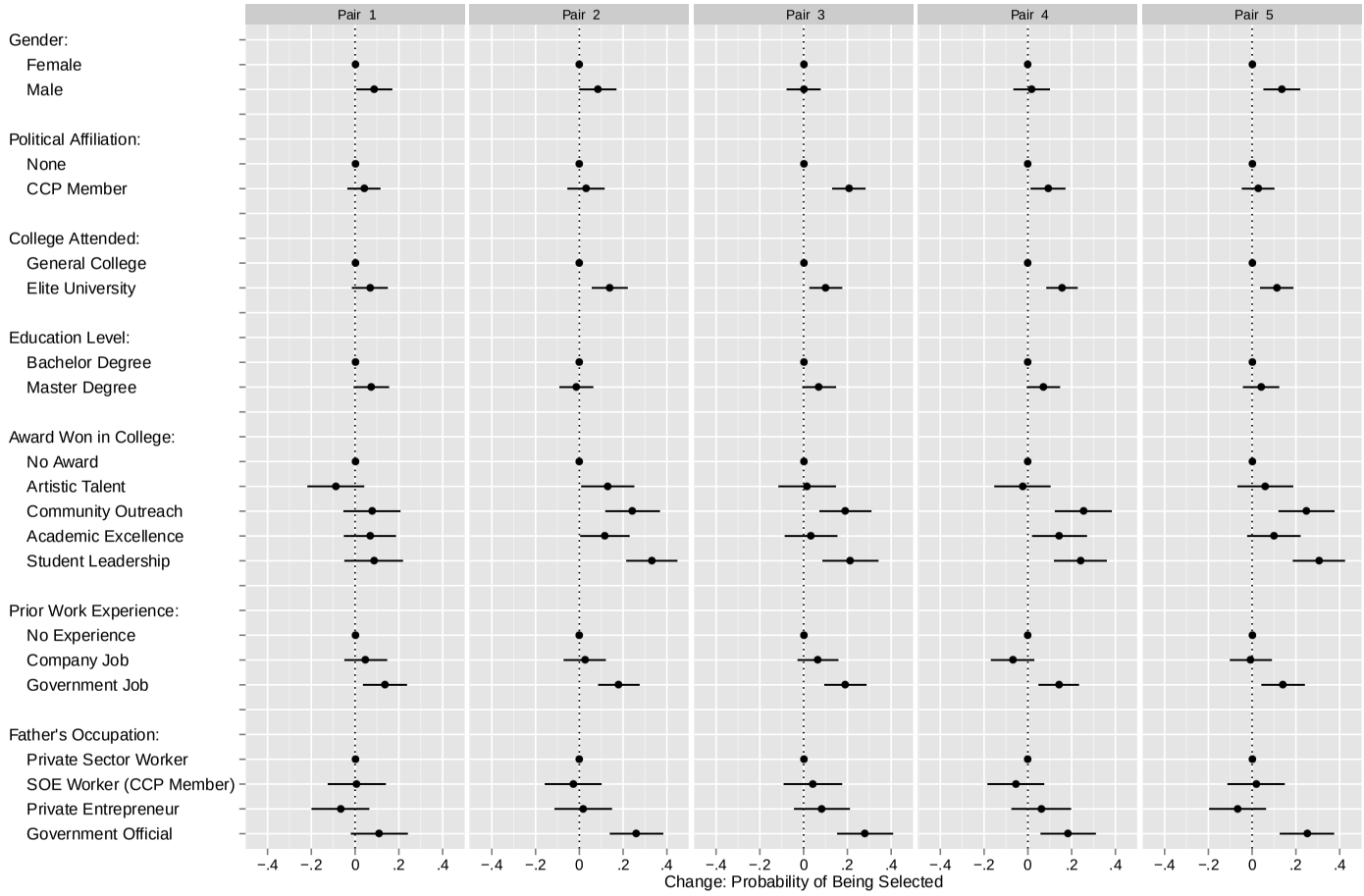
Note: These plots show the estimated AMCEs of attribute values on a candidate's probability of selection using respondent fixed effects and respondent random effects respectively. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level, while adding respondent fixed effects (the left panel) or random effects (the right panel) . Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Figure 3.10: Effects of Candidate Attributes on Probability of Selection for Online and Offline Subgroups



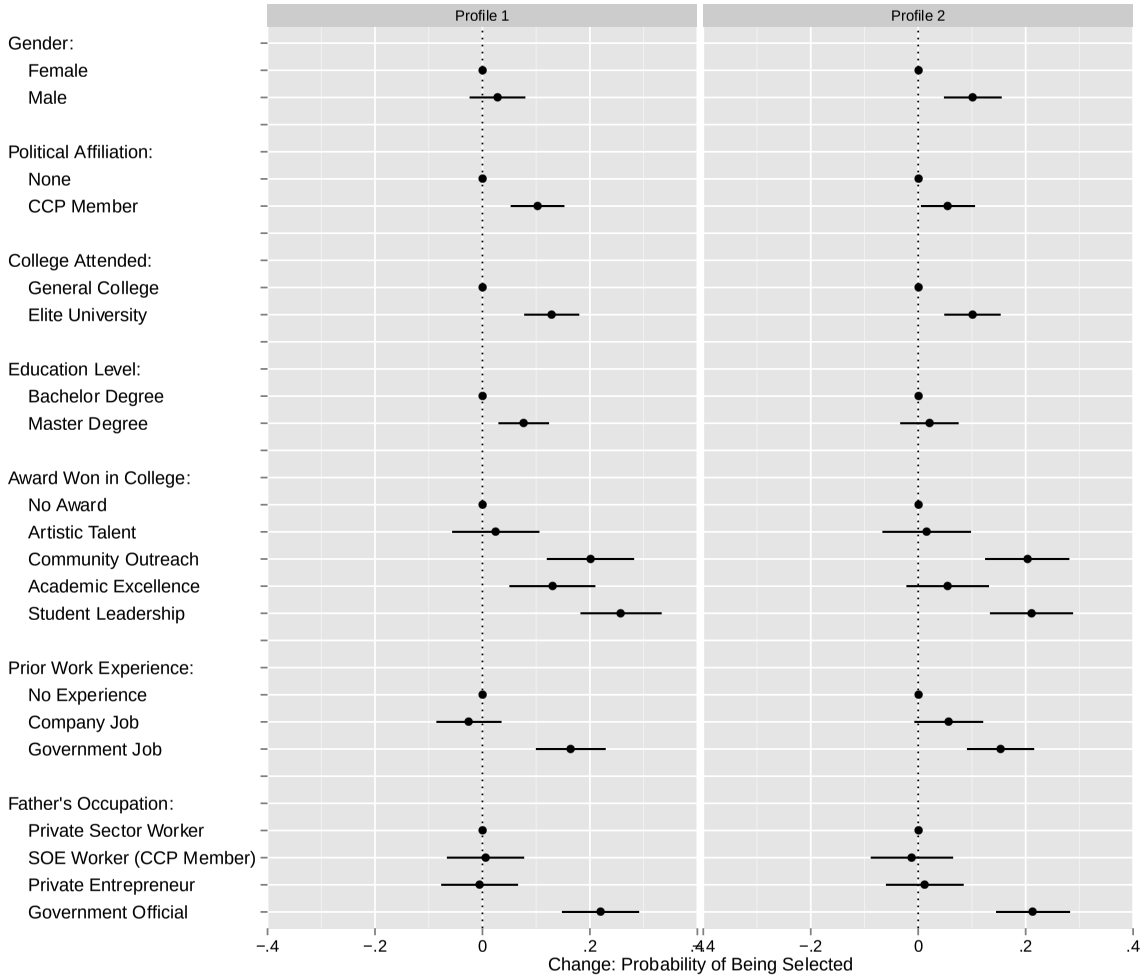
Note: These plots show the estimated AMCEs of attribute values on a candidate's probability of selection for the online respondent group and offline respondent group respectively. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Figure 3.11: Effects of Candidate Attributes on Probability of Selection by Task Number



Note: These plots show the estimated AMCEs of attribute values on a candidate's probability of selection for each of the five pairs in the survey. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Figure 3.12: Effects of Candidate Attributes on Probability of Selection by Profile Position



Note: These plots show the estimated AMCEs of attribute values on a candidate's probability of selection for different profile positions within a pair. Estimates are based on the benchmark OLS model with standard errors clustered at the respondent level. Horizontal bars represent 95% confidence intervals. The points without horizontal bars denote the reference category for each attribute.

Chapter 4

Reigning in Elite Behavior in Recruitment

In many ways, the findings in Chapter 3 should not come as a surprise. Although local elites are allies of the central government and share its interest in recruiting the best and brightest individuals into the government, they are also motivated by more immediate, private interests to choose those with personal connections to the government. Simply put, their utility function is different from that of the top leaders in the central government. Consequently, it is unrealistic, or at least unpragmatic, for the central government to try to realign local elites' preference with its own with it comes to elite recruitment.

However, although the central government cannot change local elites' inherent preference, it can alter their behavior during recruitment by imposing enforceable constraints. In other words, as long as elites are not able or not allowed to act on their patronage-based preference, they will make decisions that are more merit-based and in line with the regime's preference. Indeed, constraining elite behavior constitutes a large part of the continued evolution of NCSE. By introducing a series of supporting legislations and regulations in addition to the *Civil Service Law*, the central government has imposed an increasing number of institutional constraints on elites to regulate their behavior during NCSE.[1]

[1] See Chapter 2 for a more detailed discussion.

In this chapter, I investigate whether these institutional constraints in fact promotes meritocracy in NCSE. Specifically, I conducted an original government official survey to understand elite behavior during recruitment and whether institutional constraints have been effective at altering their behavior.

1. Empirical Strategy

A Government Official Survey

Between November 2014 and July 2015, I conducted a nationwide government official survey in collaboration with the School of Social Science at Tsinghua University in China. To gain an in-depth understanding of local elites' attitude and opinion on NCSE, I designed a battery of questions – both descriptive and experimental – on the topic of civil service recruitment. One particular objective of the survey is to assess whether the institutional constraints in NCSE and its norm of meritocracy are effective at reducing local elites' patronage behavior during recruitment. In other words, I want to find out if NCSE promotes merit-based selection by reigning in elites' divergent preference.

Ideally, to estimate the causal effect of NCSE institutional constraints, we would need panel data on elite behavior both before and after the constraints were imposed. In reality, however, the constraints have been put in place for some years and there is no systematic record of elite behavior during recruitment. To overcome this problem, I resort to a second-best identification strategy, which is to compare the behavior of two groups of elites who differ on how constrained they are by institutional rules in NCSE.

One important question asked in the survey was *how* a respondent entered the government; specifically, it identified whether a respondent joined the civil service by taking and passing the NCSE. This particular respondent characteristic is critical, as it differentiates respondents who have experienced NCSE firsthand as a candidate from those who have not.

Since those who have personally undergone the process of NCSE selection have a much better understanding of the built-in institutional constraints and the disciplinary actions they would receive for violating the constraints, it is reasonable to argue that local elites who joined the government via NCSE feel more constrained by its institutional rules than their colleagues who joined the government via some other paths. Furthermore, since the mode of recruitment – NCSE or otherwise – was not up to individual government officials when they first joined the government, there is no self-selection bias. In other words, individual elites' awareness of institutional constraints in NCSE is not determined by their other personal traits but exogenously by higher-level government policies.

Having identified the two groups of survey respondents varying in terms of their awareness of NCSE institutional constraints, I designed and implemented a list experiment in the survey to uncover local elites' true preference for patronage-based recruitment and investigate whether NCSE institutional constraints help reduce such preference. Next, I describe the list experiment in more detail.

A List Experiment

In Chapter 3, I employ a conjoint experiment to show that local elites, when unconstrained during recruitment, exhibit a privately motivated preference for candidates with political connections. In this experiment, I continue to investigate the influence of candidates' political connections and whether institutional constraints in NCSE has any effect in reducing it.

To elicit truthful answers from respondents regarding their attitude towards candidates' political connections during elite recruitment, I employ the unmatched count technique (UCT), also known as the list experiment(Ahart and Sackett 2004; Coutts and Jann 2011). One advantage of the list experiment is that it is easy to administer. Since respondents are not obligated to admit to engaging in any particular sensitive activity, they can reveal critical information without fear.

In the survey, respondents were randomly assigned into three groups of equal size: one control group and two treatment groups. All respondents were asked a question similar to the one in the conjoint experiment. It begins with a scenario description that puts the respondent in the position of an NCSE interviewer.

> **Question:** Imagine that you are serving as an NCSE interviewer to recruit new civil servants on behalf of your work unit. How many of the items below about a candidate are *key factors* that influence your decision? You only need to give the number of key factors; you do not need to enumerate which one(s).
>
> 1. education and academic major
> 2. political affiliation
> 3. local work experience
> 4. treatment item: *political connections* or *interpersonal skills*

For respondents in the control group, they were only given the first three items on the list. For the two treatment groups, respondents were given a fourth item in addition to the three given to the control group: those in Group 1 were given a treatment item of "political connections" and those in Group 1 were given a treatment item of "interpersonal skills." Although my primary interest is in the treatment of political connections, the treatment of interpersonal skills is helpful as it serves as a placebo and a reference point. Similar to political connections, interpersonal skills are hard to quantify but highly valued as a soft asset in government. Incorporating the second treatment of interpersonal skills allows me to validate the list experiment in several ways: first, it helps reveal whether survey respondents were cognizant and responsive to different treatment items; second, it provides a point of reference that gives us a better sense of the relative importance of political connections in NCSE recruitment.

The specific wording of this question is particularly suited for the identification strategy, where I differentiate respondents who took NCSE themselves from those who did not.

Since the question is based on a scenario and asks respondents how they would imagine themselves to react, their response reflects how relevant they perceive each given item to be (instead of how inherently important), which can be directly influenced by NCSE institutional constraints. For instance, candidates' political connections might be important to a survey respondent who has taken NCSE himself; however, his personal experience with NCSE has taught him that interviewers are *not* provided with information on candidates' personal background, including their political connections, and that various policies have been introduced to prohibit interaction between interviewers and candidates. As a result, even if the respondent attaches some importance to candidates' political connections, he is more likely to consider this factor *irrelevant* in the context of NCSE, as compared to a respondent who does not have personal experience with NCSE and hence is less aware of the institutional constraints.

As a measure of robustness check, the survey poses an additional question to the control group *exclusively*, which directly asks respondents to name the key factors influencing recruitment decisions from the list of five items (i.e., education and academic major, political affiliation, local work experience, political connections, and interpersonal skills). If candidates' political connections and interpersonal skills are indeed sensitive items that suffer from social desirability bias, we would expect a smaller proportion of respondents to response positively on them in this question when compared to that in the list experiment question.

Additionally, to better understand what local elites value – or what they believe they are expected to value – in candidates during civil service recruitment, the survey includes a third question asking, "What do you believe are the key criteria in the civil service recruitment? Please rank the top three in the order of importance." The items provided include exam performance, political affiliation, education background, political connections, and local work experience.

Together, these questions are aimed at eliciting government officials' opinion regarding candidates' political connections in elite recruitment. The list experiment question is designed to reveal respondents' decision-making behavior, especially whether they take candidates' political connections into account. I argue that their behavior can be altered by the institutional constraints in NCSE, especially those that make getting information on candidates' political connections difficult, impossible, or illegal. In other words, while local elites may still hold on to their preference for candidates' with political connections, the institutional rules of NCSE make them disregard this consideration or weakens its influence. Therefore, using the list experiment, I test the following hypothesis:

> *Hypothesis: Government officials who have personal experience with NCSE are less likely to consider candidates' political connections an important factor in NCSE.*

In the next section, I discuss the survey data and results from the list experiment.

2. Analysis

Data

The government official survey was fielded between November 2014 and July 2015. It covered 26 cities in eight provinces in China, and surveyed over 1,600 government officials working in different parts of the government. Table 4.1 reports the descriptive statistics on respondent characteristics.

Table 4.1: Government Official Survey: Respondent Characteristics

	N	Mean	S.D.	Min	Max
male	1,604	0.5953865	0.4909702	0	1
age	1,572	37.04771	8.215332	21	66
CCP membership	1,604	0.7811721	0.4135806	0	1
college degree	1,604	0.80798	0.3940115	0	1
leadership position	1,604	0.2568579	0.4370366	0	1
bureaucratic rank	1,553	2.224082	1.165444	1	6
entered via NCSE	1,604	0.532419	0.4991035	0	1

Slightly over half of the respondents joined the government via NCSE, which renders the sample balanced over the key independent variable in the analysis. Moreover, as a result of full randomization, respondent characteristics are also highly balanced across control and treatment groups (see Table 4.3 in appendix). This allows us to conduct the list experiment without concerns about selection bias.

Before analyzing the list experiment question, we first take a look at the other two questions concerning the influence of candidates' political connections in recruitment. When asked to name the three most important criteria in civil service recruitment, only 12.5% of the respondents mention candidates' political connection; in contrast, 83% mention exam performance and 73.5% mention local work experience (see Table 4.4). In addition, only 11.5% of the respondents in the control group identify candidates' political connection as a key factor influencing their decision in recruitment. The low percentages of respondents choosing political connections suggest that government officials understand that NCSE is supposed to be merit-based and patronage should not be a relevant factor in elite recruitment.

A Trend towards Meritocracy

Although local elites are generally cognizant of the meritocratic nature of NCSE, they may be motivated by private interests to behave differently when making recruitment decisions. To estimate how many engage in patronage practice, we turn to analyze the list experiment.

Given the fully randomized survey design, respondent characteristics are highly balanced across different groups (see Table 4.3). The difference in means for each treatment group, therefore, indicates the proportion of government officials who consider the treatment a key factor in recruitment.

Table 4.2: Effects of Different Candidate Attributes on NCSE Recruitment

		treatment groups	
	control group	political connections	interpersonal skills
	(1)	(2)	(3)
mean	1.967	2.314	2.437
	(0.036)	(0.037)	(0.037)
difference in means		0.347***	0.470***
		(0.051)	(0.052)
observations	544	526	503

Note: This table reports the mean value of *number of key factors* that influence recruitment for the control and treatment groups in the list experiment, respectively. The difference in means for each treatment group is relative to the control group.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4.2 reports the results of the difference-in-means test between the treatment and control groups. On average, respondents in the control group consider 1.967 of the three given items as key factors in recruitment, whereas respondents in the treatment group of political connections consider 2.314 of the four given items as key factors and those in the treatment group of interpersonal skills consider 2.437 of the four given items as key factors. The difference in means is 0.347 for political connections and 0.470 for interpersonal skills; both are highly statistically significant. It means that 34.7% and 47% of the respondents, respectively, take into serious account candidates' political connections and their interpersonal skills when making recruitment decisions in NCSE.

The widely acknowledged importance of interpersonal skills in NCSE recruitment is not

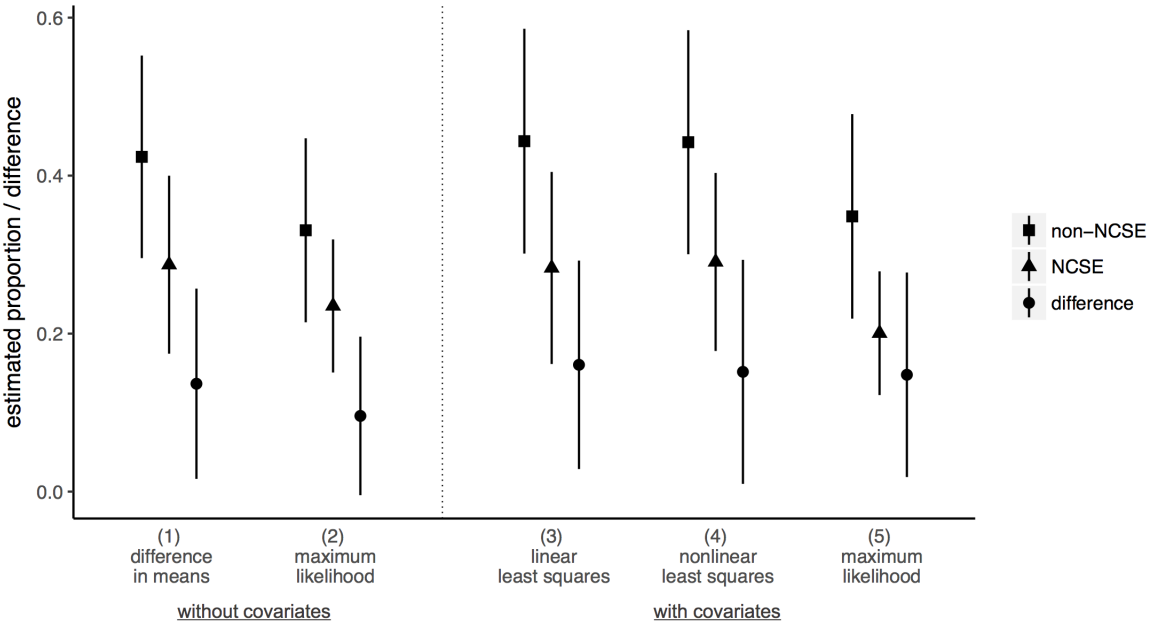
surprising. After all, much work in government depends on effective interpersonal communication and management. It is quite remarkable, however, that more than one third of the respondents attach great importance to candidates' political connections. This is far more than the 12.5% and 11.5% of respondents, respectively, in the previous two questions who consider candidates' political connections an important factor. The large discrepancy between the list experiment and direct survey questions once again demonstrates that, although government officials are conscious that they should not engage in patronage-based recruitment, a significant portion of them still do so nonetheless.

The results of the difference-in-means test largely corroborate with the findings from the conjoint experiment. However, is this behavior uniform across different groups? Do local elites behave differently as a result of having personal experience with NCSE?

To test the hypothesis, I examine if the group of respondents who have personally taken NCSE behave differently from the group of respondents who did not take NCSE. I employ a series of estimation methods to compare the proportion of respondents in each group who consider political connections a key factor. The results are reported in Figure 4.1.

First, I estimate the proportions without controlling for respondent-level covariates (columns 1 and 2). Next, to make sure that the difference in proportions between the two groups is not driven by any respondent characteristics (i.e., for instance, the NCSE group is overall younger than the non-NCSE group), I estimate the proportions controlling for respondent characteristics including gender, age, CCP membership, college degree, and leadership position. In addition to an OLS estimator (column 3), I employ two more efficient estimators, the nonlinear least squares and the maximum likelihood estimators (columns 4 and 5) (Imai 2011). Regardless of estimation methods and model specifications, the results show that the NCSE group attach significantly less importance to candidates' political connections in recruitment.

Figure 4.1: Heterogeneous Importance of Political Connections in NCSE



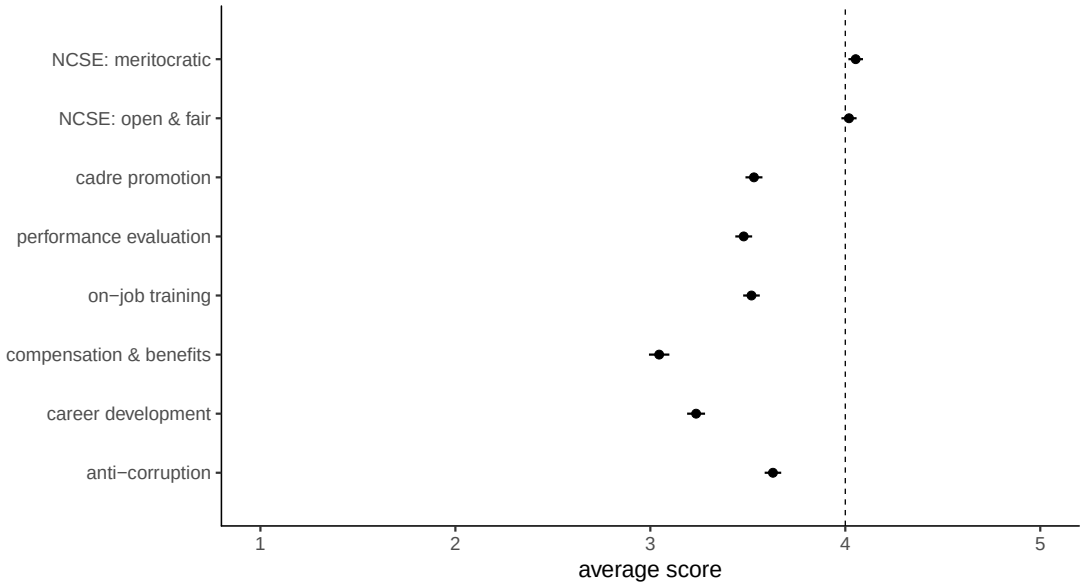
Note: This plot shows the estimated proportions of respondents who consider political connections a key factor in recruitment, based on different estimation methods. Each solid square, solid triangle, and solid circle represent the estimated proportion for the non-NCSE group, the NCSE group, and the difference between the two proportions, respectively. The solid lines represent the 95% asymptotic confidence intervals.

This difference in proportion demonstrates that government officials who have had personal experience with merit-based recruitment in NCSE are significantly less likely to consider non-merit factors when they are making recruitment decisions. This does not necessarily mean that they are morally more upright or have preferences more closely aligned with the central government. It is more likely that their own experience makes them more aware and observant of the institutional constraints in NCSE that prevent non-meritocratic practice.

While this list experiment does not directly investigate the reason why local elites who joined the government via NCSE are less likely to engage in patronage-based recruitment, the findings suggest that, as the government is filled with increasing numbers of civil servants who join the ranks through a merit-based process, local elites overall become more compliant with the meritocratic principle in recruitment.

In addition to exploring the criteria used by local elites in civil service recruitment, the survey also includes a battery of questions regarding respondents' opinion on NCSE and the civil service in general. In particular, respondents were asked to rate the different aspects of civil service management by the local government on a scale of 1 to 5 (1 for "very bad" and 5 for "very good"). As illustrated in Figure 4.2, government officials are most positive in their evaluation of civil service recruitment: the two items on NCSE – for being meritocratic and being open and fair, respectively – receive average scores above 4, the highest among all items. In comparison, other aspects of civil service management receive significantly lower scores, most of them below 3.5. Although these ratings are not the most objective evaluation, it is quite remarkable that there is a consensus inside the government that NCSE is meritocratic as well as open and fair.

Figure 4.2: Government Officials' Evaluation of Civil Service Management



Note: This plot reports the average scores respondents give to various aspect of civil service management by local government. Horizontal bars represent 95% confidence intervals.

3. Concluding Remarks

In this chapter, I estimate the effectiveness of NCSE institutional constraints on reducing patronage behavior by local elites. Employing a list experiment conducted among over 1,600 government officials, I find that a significant portion of them still consider candidates' political connections an important factor in elite recruitment. However, when I compare the group of respondents who have taken NCSE themselves to join the government with the group who have not taken NCSE, I find that the former attach much less importance to candidates' political connections, since they are more aware of and hence feel more subjected to the institutional constraints, given their personal experience with NCSE. It indicates that, as local elites become more subjected to institutional constraints in NCSE, they are less likely to exert their personal preference for non-merit factors during recruitment. The survey results also suggest that government officials believe that NCSE implementation is satisfactory, especially when compared to other aspect of civil service management, and the recruitment system is overall meritocratic as well as open and fair.

The findings in this chapter demonstrate that, as NCSE becomes more institutionalized, it becomes more effective in reducing the influence of patronage and promoting merit-based selection. The meritocratic nature of NCSE, in turn, would change ordinary citizens' perception of their upward mobility and their attitude towards the regime, which are the topics to be examined in the next chapter.

Appendix

Table 4.3: Respondent Characteristics by Treatment Status

	N	Mean	S.D.	Min	Max
Control Group					
male	550	0.591	0.492	0	1
age	537	37.2	8.071	22	60
CCP membership	550	0.785	0.411	0	1
college degree	550	0.833	0.374	0	1
leadership position	550	0.251	0.434	0	1
bureaucratic rank	530	2.234	1.169	1	6
entered via NCSE	550	0.551	0.498	0	1
Treatment Group 1: Political Connections					
male	538	0.584	0.493	0	1
age	525	36.7	8.475	22	66
CCP membership	538	0.775	0.418	0	1
college degree	538	0.805	0.397	0	1
leadership position	538	0.257	0.437	0	1
bureaucratic rank	521	2.177	1.160	1	6
entered via NCSE	538	0.561	0.497	0	1
Treatment Group 2: Interpersonal Skills					
male	516	0.612	0.488	0	1
age	510	37.3	8.095	21	66
CCP membership	516	0.783	0.413	0	1
college degree	516	0.785	0.411	0	1
leadership position	516	0.264	0.441	0	1
bureaucratic rank	502	2.63	1.168	1	6
entered via NCSE	516	0.483	0.500	0	1

Table 4.4: Importance of Various Candidate Attributes in Recruitment

candidate attribute	most important	second most important	third most important	top three (sum)
exam performance	0.544	0.151	0.136	0.830
political affiliation	0.079	0.161	0.158	0.398
education background	0.127	0.316	0.252	0.695
political connections	0.019	0.054	0.053	0.125
local work experience	0.188	0.257	0.291	0.735

Note: The first three columns in this table report the proportions of respondents who consider each of the candidate attributes "the most important," "the second most important," and "the third most important" criterion in civil service recruitment. The last column sums the proportions in the first three columns and reports the proportions of respondents who consider each of the candidate attributes among the top three most important criteria in civil service recruitment.

Chapter 5

Co-Opting with Upward Mobility

By introducing the NCSE and buttressing its enforcement with necessary laws and regulations, the CCP has effectively established an institution of merit-based elite recruitment that is open to a large segment of the population. College-educated youths between the age of 18 and 35, regardless of their family background and political connections, now have a chance to get a job in the government and move up the socioeconomic ladder based on their talent and hard work. While the number of individuals who eventually succeed in getting into the government is relatively small, the regularly held exam offers a prized opening for millions of young people. How does the presence of an additional career opportunity affect their personal upward mobility chances? Does it have any influence on their socioeconomic preference? And, ultimately, what are the political implications for the CCP regime?

In this chapter, I put my main argument to test, which is that NCSE enhances the perception of upward mobility among those who are eligible to participate. Whether or not they choose to take the exam or are eventually successful in it, the much touted fair and transparent process of NCSE helps forge a belief in them that, if they put in the necessary effort, they would have a good chance of becoming regime insiders. This optimism also shapes their distributive preference: since they now have a better prospect of upward mobility,

they prefer less income redistribution in the regime. The enhanced prospect of personal betterment through individual effort, coupled with dampened preference for redistribution, makes college-educated youths much less of a threat to regime stability. By establishing a merit-based elite recruitment system, CCP effectively co-opts a significant segment of the society – those who are highly capable of dissent and opposition – with upward mobility.

Using data from a national representative survey, I employ a generalized difference-in-differences framework to examine the effect of NCSE on college-educated youths' perception of upward mobility and their distributive preference. Additionally, using data from a college student survey, I explore the causal mechanism through which NCSE affects individual perception of upward mobility.

1. Empirical Strategy

A Difference-in-Differences Framework

To estimate the effect of NCSE on public perception and attitude, I focus on the exams administered by provinces rather than the central government. As described in Chapter 1, the institution of NCSE largely consists of two parallel parts – the "national exam" administered by the central government for positions in national ministries and department, and the "provincial exam" administered by each province for positions in the four local levels of government under its jurisdiction. Between the two, although some may consider the national exam more prestigious, it offers a much smaller number of positions each year than the number of positions in provincial exams combined.[1] Moreover, it is more realistic for the majority of applicants to work in the locality of their origin instead of going to Beijing. As a result, provincial exams are often a more viable and hence more popular choice for

[1]For example, based on incomplete statistics compiled from media reports, in 2009, after all 30 mainland provinces had introduced the NCSE, the combined number of local government positions from 22 provinces was 100,989, whereas the number of central government positions was 13,566.

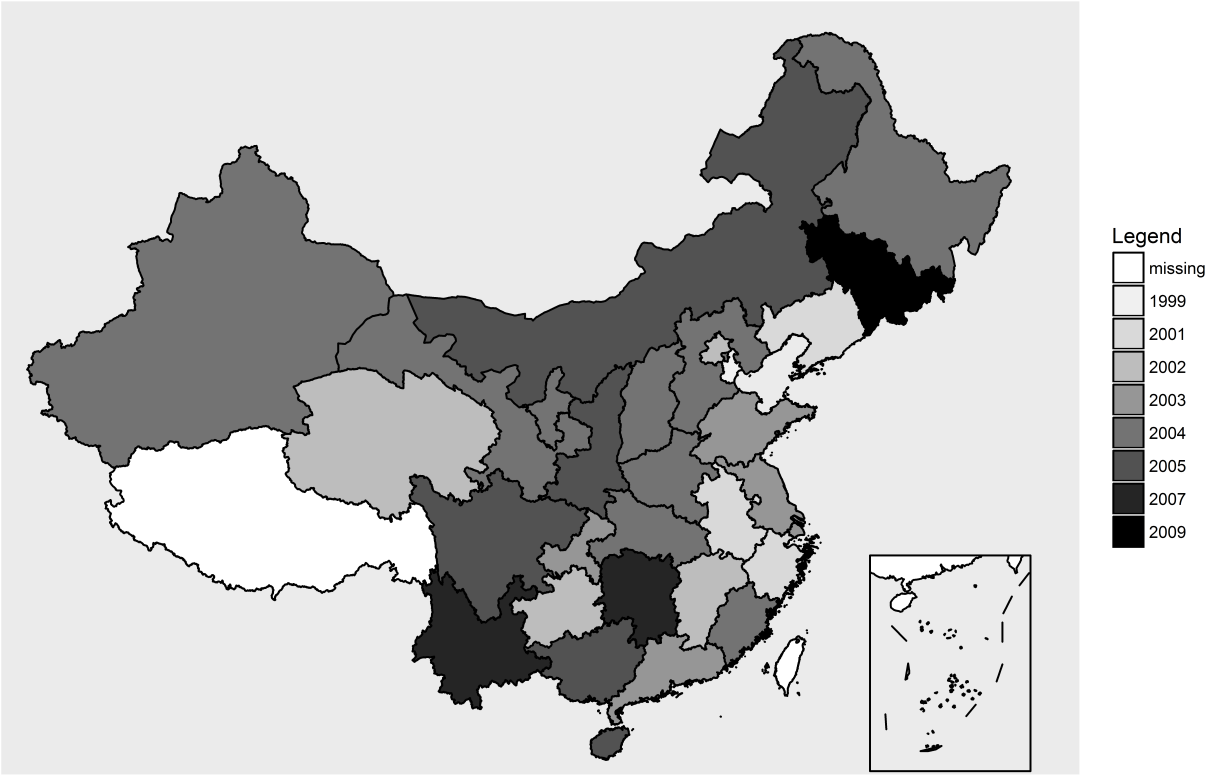
college-educated youths.

By focusing on the provincial exams, I am able to take advantage of the fact that NCSE was introduced by individual provinces in a staggered fashion over the span of several years. Instead of all provinces introducing NCSE at the same time after the central government called for the adoption of the principle of *fanjin bikao* ("all entries via exam") in civil service recruitment, some implemented it as early as in 1999, whereas others did so a few years later. Once a province adopted the *fanjin bikao* principle, it must fill all new government positions via NCSE, resulting in a sharp increase in career opportunities in the civil service for the eligible public.

To determine when NCSE was implemented in each province, I use an online database of laws and government regulations in China (http://www.pkulaw.cn/) to research all publicly released government documents by each province on the topic of civil service recruitment. Since I am interested in the *sharp increase* in government job opportunities available for open competition, I look for the phrase *fanjin bikao* and use the date of its first appearance in each province's official documents as the year when NCSE was fully implemented in that province. Figure 5.1 shows the year of NCSE introduction in each province.

Given the age requirement in NCSE (i.e., 35 years old or younger), its staggered implementation at the province level means that college-educated individuals of the same birth cohort may have been eligibility to apply and compete for government jobs in certain provinces but not in others, depending on their locality of residence. The resultant province-cohort variation determined if a college-educate person was eligible to take advantage of the sharp increase in government career opportunities once NCSE was implemented.

Figure 5.1: Year of NCSE Introduction at Province Level



Note: This map shows the year of NCSE introduction for each Chinese province.

Exploiting the province-cohort variation, I employ a generalized difference-in-differences (DID) design to examine whether there is any difference in perception of upward mobility between the group of college-educated individuals who became eligible to apply for government jobs as a result of NCSE introduction and the other group of college-educated individuals who could not qualify because of the age requirement.

2. Data

For the main analysis, I use data from the four latests waves of the Chinese General Social Survey (CGSS), conducted between 2010 and 2013. Since the last province to fully implement NCSE did so in 2009, by incorporating data dating from 2010, I make sure that there is a treatment group (i.e. individuals who became eligible to apply for civil service jobs as a result of NCSE implementation) as well as a control group in every province.

One advantage of using the repeated cross-sectional data over using panel survey data is the large sample size it offers by pooling together multiple waves. Since I am primarily interested in college-educated individuals, who constitute a relatively small portion of the population,[2] it is important to use a set of data that offers a sufficiently sizable group of college-educated respondents. By pooling four waves of CGSS data, I obtain a college-educated sample of over 4,500 respondents who were between the age of 18 and 60 years old at the time of survey.

Identifying Beneficiaries of NCSE

To identify respondents who were beneficiaries of NCSE introduction, I constructed a dichotomous variable, *eligibility at introduction*, as the main predictor. By matching each

[2]According to the official report from the 2010 National Census, published by the National Bureau of Statistics, individuals with college education constitute 8.93% of the population; see http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/qgrkpcgb/201104/t20110428_30327.html (accessed on June 9, 2017). A more recent estimate from the official report of the 2015 1% National Population Sample Survey adjusts that statistic to 12.45%; see http://www.stats.gov.cn/tjsj/zxfb/201604/t20160420_1346151.html (accessed on June 9, 2017).

respondent's province of residence to the NCSE introduction timetable (as shown in Figure 5.1), I can determine his or her age when NCSE was first implemented in the province of his or her residence. Because there is a strict age eligibility requirement, those of age 35 or younger were eligible to take the exam for at least once and are hence coded as 1 for *eligibility at introduction*; those older than 35 did not have any chance to become civil servants via NCSE and are hence coded as 0. In other words, *eligibility at introduction* measures whether a respondent was ever able to take advantage of the new elite recruitment system. Even though not everyone who was eligible chose to take the exam or eventually succeeded in it, they were offered an additional career opportunity; in contrast, those who missed the age cutoff were not given an opportunity to pursue this career path at all. This variable, therefore, allows me to explore whether the presence of an additional opportunity has any effect on respondents' perception of their upward mobility and distributive preference.

In addition, I construct a second dichotomous variable, *current eligibility*, which indicates whether a respondent was still eligible to take NCSE at the time of the survey. Those who were of age 35 years or younger at the time of the survey are coded as 1, and those older than 35 are coded as 0. Since individuals who were still eligible to take NCSE enjoyed an additional option, this may influence how they evaluate their upward mobility. This variable, therefore, is used as a control in alternative model specifications.

Measuring Upward Mobility and Distributive Preference

To measure respondents' perception of upward mobility, I make use of survey questions that ask about respondents' socioeconomic status rather than those that ask about their personal or family income. Given that the prestige and advantages of being a regime insider in China are often not directly measured in monetary terms – in fact, studies show that even wealthy business owners in China seek to become regime insiders in order to boost their business or protect it from expropriation (e.g., Truex 2014; Hou 2017) – survey questions on

personal or family income do not sufficiently capture a respondent's socioeconomic wellbeing in the Chinese society.[3] In particular, I use three questions that ask respondents to report or estimate their socioeconomic status at various points of their lives. Each of the three questions asks a respondent to place him- or herself in a ten-rung ladder that represents different socioeconomic classes in a society, either at the time of the survey (i.e. current status), ten years before the survey (i.e. past status), or ten years after the survey (i.e. future status). Based on these questions, I construct two variables concerning a respondent's mobility: *mobility experience* and *mobility prospect*.

Mobility experience is calculated by taking the difference between a respondent's current status and past status; it measures the movement a respondent has made in terms of his or her socioeconomic wellbeing over the past decade. Since a civil service job brings its occupant both material benefits and social prestige, the introduction of NCSE is expected to increase *mobility experience*, on average, for those who were eligible to apply.[4]

Similarly, *mobility prospect* is calculated by taking the difference between a respondent's future status and current status; it measures the movement a respondent expects to make in terms of socioeconomic wellbeing in the next decade. Because the introduction of NCSE presented an additional opportunity for those who were eligible at the time, they were better positioned to make a career choice best suited for their ability and preference, which could consequently lead to better mobility prospect in the future. Moreover, an individual's assessment of future mobility is partly shaped by his or her mobility trajectory in the past; as such, those who stood to benefit from NCSE are expected to be more optimistic about their future.

Besides the two indicators of upward mobility, I also examine respondents' attitude to-

[3] In addition, questions on income suffer from large numbers of missing values.

[4] Although not everyone who were eligible took the exam, it is reasonable to argue that those who regarded NCSE as the most efficient or suitable channel of upward mobility chose to take the exam and some subsequently became civil servants. Even those who did not take the exam may still regard NCSE as a viable alternative that helps increase their overall chance of upward mobility.

ward income redistribution and whether NCSE has any effect on it. To measure *redistribution preference*, I use the survey question that asks whether a respondent agrees with the following statement: "We should tax the rich more to help the poor." Responses are graded on a scale of 1 to 5, ranging from strongly disagree to strongly agree.[5] Those who were eligible for NCSE at the time of its introduction are expected to prefer less redistribution than those who were not, since they enjoyed better mobility prospect.

Table 5.1 reports the descriptive statistics of the independent and dependent variables in the data, as well as respondent characteristics.

Table 5.1: CGSS Data: Summary Statistics

	N	Mean	Std. Dev.	Min	Max
NCSE Eligibility					
eligibility at introduction	4,595	0.814	0.389	0	1
current eligibility	4,595	0.585	0.493	0	1
Outcomes of Interest					
mobility experience	4,575	0.702	1.486	-9	9
mobility prospect	4,013	1.527	1.458	-4	9
redistribution preference	2,654	3.421	0.985	1	5
Respondent Characteristics					
male	4,595	0.520	0.500	0	1
Han ethnic	4,595	0.932	0.251	0	1
urban	4,595	0.872	0.334	0	1
CCP member	4,595	0.263	0.440	0	1
civil servant	4,595	0.079	0.270	0	1
parent in CCP	4,595	0.325	0.469	0	1

[5]This question was only asked in the 2010 and 2013 waves of CGSS. The sample size, consequently, is about half of the full sample.

3. Analysis

Identification Model

To estimate the effects of NCSE, I apply a generalized difference-in-differences framework to exploit the province-cohort variation in eligibility among college-educated individuals . Since province-level NCSE was implemented over a span of several years, the 35-or-younger age requirement creates a situation where individuals of the same birth cohort may or may not have had the opportunity to apply for government jobs, depending on their province of residence. I estimate the following regression,

$$y_{icps} = \beta NCSE_{cp} + \Sigma\gamma_c + \Sigma\delta_p + \theta_s + \epsilon_{icp} \tag{5.1}$$

where y_{icps} represents the outcome of interest of individual i of cohort c in province p surveyed in year s; $NCSE_{cp}$ represents the independent variable, *eligibility at introduction*, for cohort c in in province p; γ_c and δ_p are full sets of cohort and province fixed effects; θ_s capture the survey year fixed effects; and ϵ_{icp} represents any idiosyncratic differences that are correlated across individuals within a province$\times$cohort cell.

By using a difference-in-differences framework, the baseline model in Equation 5.1 allows me to address a variety of concerns in identifying the effects of NCSE introduction. First, province-level differences in economic development, overall upward mobility, income level, and political culture may be correlated with individual experience and attitude regarding upward mobility and redistribution. By controlling for province fixed effects, this model exploits cross-cohort variation within each province as a result of staggered NCSE implementation. Similarly, cohort-level differences could lead to changes in individual attitude, independent of NCSE; by including cohort fixed effects, this model is able to difference out cross-cohort changes that occur even in the absence of NCSE implementation.

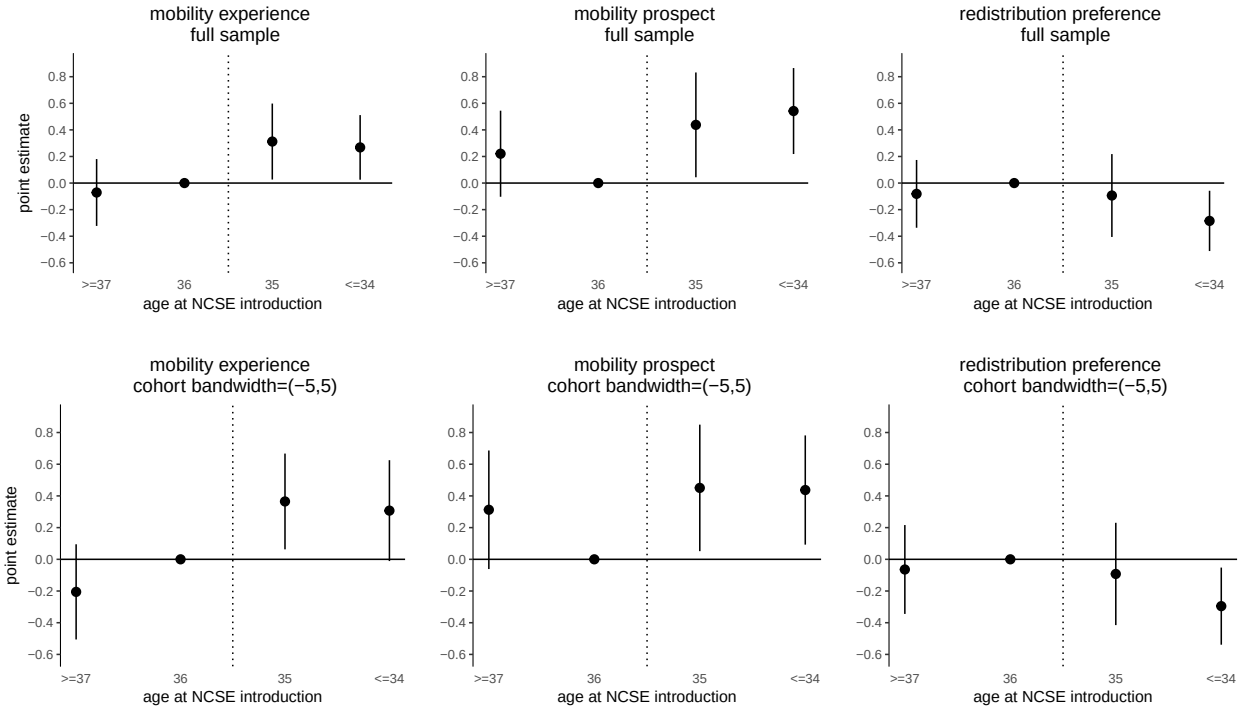
In addition to the baseline model, I estimate additional specifications, including (1) regressions controlling province×cohort-level covarites, (2) regressions controlling for for individual-level covariates, and (3) regressions controlling for province-specific cohort fixed effects.

Main Results

I begin the analysis by estimating the baseline difference-in-differences model. Instead of pooling all respondents in two broad groups of treatment and control based on their age at the time of NCSE introduction in their respective province of residence, I first examine whether respondents' perception and attitude vary depending on the "distance" between their age and the NCSE eligibility cutoff (i.e., 35 years old). This enables me to explore whether their perception and attitude vary with age even in the absence of NCSE, and whether there is a sharp change following the NCSE introduction. I treat the group who missed the age cutoff by just one year – those who were 36 years old at the time of NCSE introduction – as the omitted category, and compare it with an older age group (age 37 and above), the age group who *just* qualified to take the NCSE (age 35), and a younger age group (age 34 and below) who were well eligible for the exam.

Figure 5.2 reports the coefficient estimates of dummy variables indicating each age group with 90% confidence interval. The three plots in the top row report results based on regressions using the full sample, encompassing all cohorts. To make sure that the estimates for the oldest and youngest age groups are *not* driven by respondents on the far tails of the age cohort distribution, I estimate the regressions again using only ten cohorts, five of which just missed the NCSE age requirement (i.e. age 36 to 40), and the other five just qualified for it (i.e. age 31 to 35); results of these regressions are reported in the three plots in the bottom row. As shown, estimates from both rows are highly consistent.

Figure 5.2: Effects of NCSE Introduction on Different Age Groups



Note: Each of the figures shows the estimated effect of NCSE introduction by respondent age group with 90% confidence interval. Estimates are based on regressions of each outcome on cohort and province fixed effects, as well as a set of dummy variables indicating age groups; standard errors are clustered at the province×cohort level.

For the outcome *mobility experience*, we observe a significant jump moving from the age-ineligible groups to the age-eligible groups. In particular, compared to the age group of 36, the age group of 35 experienced significantly more upward movement in socioeconomic status during the past ten years; a significant positive shift of similar scale is also seen in younger age groups. In contrast, respondents older than 36 years old at the time of NCSE introduction do not differ significantly in their mobility experience from the reference group. A similar pattern is observed for the outcome *mobility prospect* in the middle column. In the last column, on the outcome of *redistribution preference*, we do not observe a significant *immediate* shift at the age cutoff, but younger groups do report a weaker preference for income distribution even when the sample is limited to 10 cohorts; this is probably due to their repeated chance of taking NCSE, which increases the likelihood of entering the political elite class.

The patterns of coefficient estimates reported in Figure 5.2 show that there is no general trend of change in perception or attitude based on respondent age. Specifically, we do not observe any significant difference between those who missed the NCSE age cutoff by just one year and those who were even older. We can also see that the outcomes are similar and consistent across the age groups that were eligible to take NCSE, especially for outcomes pertaining to perception of social mobility. This indicates that the sharp differences observed across NCSE eligibility is not limited to only particular age groups.

Next, I estimate the standard difference-in-differences model in Equation 5.1, examining differences between respondents who were eligible to take NCSE at least once and respondents who were never eligible because of their age, controlling for province and cohort fixed effects. Table 5.2 reports the coefficient estimates of respondent eligibility at the time of NCSE introduction. For each outcome of interest, I estimate the model first using the full sample of all cohorts (Panel A), then using samples of fewer cohorts around the 35-years-old age cutoff (Panels B and C). Restricting the sample to fewer cohorts reduces imbalance of

Table 5.2: Effects of NCSE Eligibility

	mobility experience	mobility prospect		redistribution preference	
	(1)	(2)	(3)	(4)	(5)
A: full sample					
eligibility at introduction	0.287***	0.395***	0.295***	-0.195**	-0.186*
	(0.088)	(0.100)	(0.100)	(0.096)	(0.097)
current eligibility			0.519***		-0.052
			(0.074)		(0.079)
observations	4400	3839	3839	2539	2539
B: cohort bandwidth=(-10, 10)					
eligibility at introduction	0.305***	0.362***	0.304***	-0.171*	-0.168
	(0.092)	(0.097)	(0.099)	(0.101)	(0.103)
current eligibility			0.272**		-0.014
			(0.118)		(0.127)
observations	1818	1405	1405	1047	1047
C: cohort bandwidth=(-5, 5)					
eligibility at introduction	0.248**	0.244**	0.220*	-0.199*	-0.209*
	(0.109)	(0.121)	(0.117)	(0.114)	(0.117)
current eligibility			0.422		0.223
			(0.563)		(0.328)
observations	978	729	729	541	541

Note: All regressions include a full set of province and cohort fixed effects, as well as survey year fixed effects. Robust standard errors clustered at the province×cohort level are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

respondent characteristic between the treatment and control groups and prevents coefficient estimates from being driven by the youngest and oldest respondent in the full sample, thus helping us to better isolate the effect of NCSE introduction.

Column (1) of Table 5.2 reports the estimated effect of NCSE introduction on respondents' *mobility experience* in the past ten years. Estimates in all three panels show that individuals who were eligible for NCSE at the time of its introduction experienced greater upward mobility than those who were not. It can be inferred that NCSE has enhanced the perceived mobility experience for those who were eligible to take advantage of it. For this group, the introduction of NCSE presented them with an additional opportunity to advance their socioeconomic status; as a result, they have, on average, experienced greater upward mobility.

Columns (2) and (3) report the estimated effect of NCSE introduction on respondents' *mobility prospect* for the next ten years. Since this outcome concerns with respondents' future prospect, which can be affected by whether they were still eligible to take NCSE at the time of the survey, I control for *current eligibility* in column (3). As shown in all three panels, *eligibility at introduction* has a significant, positive effect, indicating that those who were eligible to take advantage of the new elite recruitment system are more optimistic about their future mobility.

In addition, the positive coefficient estimates on *current eligibility* suggest that the presence of NCSE as a viable career path increases a respondent's optimism about his or her future mobility. The statistically insignificant estimate in Panel C is primarily a result of extreme sample imbalance: by restricting the sample to respondents of age 31 to 40 at the time of NCSE introduction in each province, we are left with only 15 respondents who were *currently eligible* for NCSE at the time of the survey and more than 700 who were no longer eligible.

Lastly, columns (4) and (5) report the estimated effect of NCSE introduction on respon-

dents' *redistribution preference*, with column (5) controlling for their current eligibility. The significant, negative coefficient estimates on *eligibility at introduction* are largely consistent and robust across different samples and model specifications, indicating that NCSE introduction has led to reduced preference for redistribution among those who were given additional upward mobility opportunities.

Together, Figure 5.2 and Table 5.2 present clear evidence that NCSE introduction has a significant positive effect on individual upward mobility as perceived by those who were eligible to take advantage of the new elite recruitment system. Although not all of them took the exam or subsequently became civil servants, NCSE was a welcome addition as a channel of upward mobility. On average, this group report greater upward movement in terms of socioeconomic status, and they are more optimistic about their future mobility. Moreover, they are less in favor of income redistribution from the rich to the poor.

Robustness Checks

(a) Balance of Respondent Characteristics

One potential concern with the difference-in-differences model used in the analysis, which identifies the effect of NCSE using the arbitrary age cutoff, is that there could be imbalance in respondent characteristics related to their age. Since those who were ineligible for NCSE at the time of its introduction tend to be older (notwithstanding the varied implementation time in different provinces), the control group overall may exhibit characteristics that are distinct from the treatment group.

In columns (1) and (2) of Table 5.3, I first present the mean respondent characteristics for the control and treatment groups, respectively, as determined by the dummy variable *eligibility at introduction*. In columns (3) and (4), I report the raw, unconditional differences between the two groups and the p-values testing for their statistical significance. When we examine the full sample (see Panel A), the two groups are significantly different in almost

every aspect; however, as we restrict the sample to fewer cohorts around the NCSE introduction date (see Panels B and C), the two groups become more similar. In Panel C with only ten cohorts, the two groups are almost statistically indistinguishable; the balance in characteristics here provides further justification for estimating the regressions using smaller cohort bandwidths. The unconditional imbalance in the full sample, however, is to be expected. Since the respondents in the treatment group are overall younger, they tend to be less male (as education investment in daughters has increased, thanks to the one-child policy), less urban (as more rural students enrolled in universities), with fewer CCP members, fewer civil servants and fewer with parents in CCP.

I then report, in columns (5) and (6), the differences in means conditional on province and cohort fixed effects and the p-values testing for their statistical significance. As shown, after taking into account the average characteristics of province and cohort, the two groups become more similar and increasingly so as we narrow the cohort bandwidth. The remaining differences in means will be addressed when I estimate an alternative model specification that take into account individual-level characteristics (Table 5.6, Panel C).

(b) Placebo Test

Another concern with the model is that it might be partly capturing the effect of age when it estimates the effect of NCSE eligibility. There is a case to be made that younger people – who are more likely to be eligible for NCSE – tend to experience greater mobility and be more optimistic about future mobility. To make sure that the model captures the effect of a policy shock, i.e., NCSE introduction, rather than a general trend, I conduct a placebo test of the baseline results by arbitrary shifting the NCSE implementation date in every province by 5 years forward and backward, respectively; correspondingly, respondents' eligibility status was adjusted based on their age at the new implementation date. If there is no genuine shock effect of NCSE introduction, I except the coefficient estimates on *eligibility at introduction*

to be significant and positive.

In Table 5.4, I replicate the baseline regression with cohort bandwidth (-5, 5) and find no significant results on any outcome of interest. This provides further evidence that results in the baseline model are not driven by any long-term trend and, instead, represent the effect of a one-time policy shock.

(c) Determining NCSE Introduction Date

There remains a possibility that the staggered implementation of NCSE at the province level is not random. The timing of NCSE introduction might be determined by some province-level characteristics, which in turn could influence individual respondents' perception of upward mobility. This is particularly plausible with the macroeconomic conditions in a province, which could simultaneously influence its government's decision to adopt NCSE and affect its residents' evaluation of their mobility. Similarly, the size of government, measured by its fiscal revenue and expenditure, could influence both the timing of NCSE introduction and individuals' mobility perception and attitude.

To address this question, I employ two approaches to estimate any possible effects of provincial-level determinants on the timing of NCSE introduction. First, I use a cross-sectional dataset of province characteristics in 1999 to predict the timing of NCSE introduction in each province;[6] second, I use a panel data set of province×year observations to determine if province characteristics in a given year predict NCSE introduction in the next year. I estimate both an ordinary least squares (OLS) model and a Cox proportional hazard model with each approach.

As shown in Table 5.5, the indicators of province characteristics are either insignificant or inconsistent at predicting the timing of NCSE introduction. Neither the size of the economy, the size of the government, or the employment rate is predictive. The level of economic

[6]The year 1999 is chosen because the first province to introduce NCSE did so in 1999. Using province characteristics from other yeas between 1999 and 2009 does not change the regression results significantly.

development in 1999, measured by 1999 *GDP per capita* in each province, yields statistically significant coefficient estimates; three out of four coefficient estimates (columns (2)-(4)) indicate that higher per capita income in a province is associated with earlier introduction of NCSE. I take this factor into account when estimating alternative model specifications next (Table 5.6, Panel D).

(d) Alternative Model Specifications

Last but not least, to explore the robustness of the baseline results, I estimate additional model specifications and report the coefficient estimates on *eligibility at introduction* in Table 5.6, where the five columns have the same predictor variable(s) and the same outcome variable as the five columns in Table 5.2, respectively. For each specification, I estimate the regressions first using the full sample, then using smaller samples with 20 and 10 age cohorts, respectively.

Panel A of Table 5.6 presents the baseline estimates using a parsimonious specification that includes only province and cohort fixed effects, as well as survey year fixed effects. I first cluster the standard errors at the province×cohort level and report the corresponding p-values in brackets in the first row immediately below the coefficient values. I then cluster the standard errors at the province level. Given that the number of province-level clusters is small, I implement the wild bootstrap procedure (Cameron, Gelbach and Miller 2008) and report the corresponding p-values in brackets in the second row after coefficient valuies. Comparing the p-values, we see that changing the level of clustering does not affect our statistical inferences.

To address the concern that NCSE introduction might have coincided with variation in province characteristics that could affect respondent attitudes at the province×cohort level, I control for the five province-level variables listed in Table 5.5 at the province×cohort level in the regressions. As reported in Panel B, the estimated effects of *eligibility at introduction*

on outcomes of interest are nearly identical to the baseline estimates.

Panel C reports coefficient estimates when controlling for individual-level characteristics, including gender, ethnicity, *hukou* status, CCP membership, civil servant, and parent in CCP. By doing so, I address any remaining concern with the imbalance of respondent characteristics between control and treatment groups, especially when using the full sample. The coefficient estimates are largely consistent with that of the baseline, with those on *redistribution preference* being slightly less robust. Moreover, by controlling for the dummy variable, civil servant, I make sure that the significant positive effect of NCSE on *mobility experience* is not driven only by those who succeeded in the exam and subsequently became civil servants.

Lastly, based on the analysis in Table 5.5, we see that province-level GDP per capita in 1999 is somewhat predictive of the timing of NCSE introduction, which may in turn affect the attitude of respondents from particular cohorts. In Panel D, I estimate the model while controlling for the interaction between a province's 1999 GDP per capital interacted with cohort fixed effects. Again, the coefficient estimates are nearly identical with that of the baseline.

In sum, the alternative model specifications produce coefficient estimates on *eligibility at introduction* that are highly consistent with those from the baseline and further corroborates the main findings.

4. Exploring Causal Mechanism

The data analysis in this chapter so far provides clear evidence that NCSE has a positive effect on perception of upward mobility among college-educated individuals: the opportunity of becoming regime insiders makes them more optimistic about their upward mobility and less demanding with income redistribution.

The analysis, however, does not shed much light on the mechanism through which NCSE

influences individual perception and attitude, due to lack of relevant information in the CGSS data. My theoretical argument assumes that merit-based elite recruitment makes more people believe that they can now pursue a career in government regardless of personal background. Is this assumption true? Does NCSE enhance perception of upward mobility because its merit-based selection makes more college-educated youths view civil service as a viable career choice, which was previously closed off to the vast majority who did not have the necessary political connections? In other words, does NCSE affect their career preference vis-à-vis civil service?

To bridge this gap in the argument, I resort to a different set of survey data and present evidence on *how* NCSE influences college-educated youths' perception of upward mobility.

Data & Empirical Strategy

I draw on data from the Beijing College Panel Survey (BCPS). The 2009 wave of BCPS, the only wave that is currently available, interviewed 4,752 college students enrolled in 15 universities in China's capital, Beijing. Using a multi-stage, stratified probability proportional to size (PPS) method, the survey drew a random sample of college students based on Beijing Municipal Government's Students Registration Database. All questionnaires were distributed by the universities and self-administered by respondents. The absence of an interviewer during the survey helped reduce respondents' concerns about social desirability.

Using the BCPS data, I examine whether students from provinces where NCSE has been implemented for a longer period of time have a stronger preference for civil service as their future career. As discussed in Chapter 2, the institutionalization of meritocracy in NCSE was a gradual process; the length of NCSE implementation in a province can thus be viewed as a rough proxy for the degree of meritocracy in elite recruitment and its robustness as a channel of upward mobility for college-educated citizens. Based on the timetable of province-level NCSE introduction (see Figure 5.1), I generate a continuous variable for each

respondent, *years of NCSE implementation*, calculated as the number of years lapsed since NCSE introduction in his or her province until 2009 when the survey was conducted.

The outcome of interest is college students' career preference, which is measured by two questions in the survey. The first asks what type of organization a student most wants to work for after graduation; one of the choices is "CCP and government organizations The second asks what type of job a student considers most desirable after graduation; one of the choices is "civil servant".[7] I construct two dichotomous variables, *government organization* and *civil service*, based on these two questions, respectively, where respondents who chose "CCP and government organizations" and "civil servant" are coded as 1 and the others as 0. These two dichotomous variables are the dependent variables, measuring students' career preference vis-à-vis working in the government.

Using a logit regression, I estimate the following model,

$$Y_{ip} = \alpha + \beta NCSE_p + \Sigma\delta X_i + \Sigma\gamma Z_p + \epsilon_i \tag{5.2}$$

where Y_{ip} represents the career choice of respondent i from province p, $NCSE_p$ measures the number of years NCSE had been implemented in province p. The model controls for both individual- and province-level covariates that could influence a respondent's career preference: X_i represents a set of individual-level characteristics of respondent i, including gender, ethnicity, CCP membership, score in college entrance exam, academic standing in current university, hours spent on extra-curricular, having parent(s) working in the government, size of home city, academic major, class cohort, and type of university; Z_p represents a set of province-level characteristics where a respondent comes from, including GDP, GDP per capita, fiscal revenue, fiscal expenditure, FDI inflow, population, and employment rate.[8]

[7] See Table 5.7 for more details.

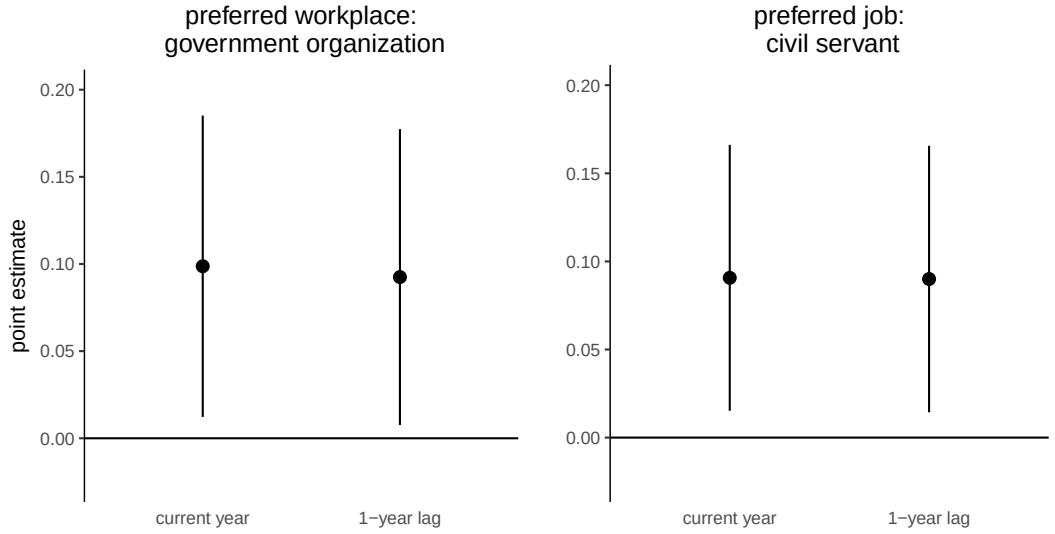
[8] GDP and GDP per capita are included to account for level of economic development in a province, which can influence the availability of other upward mobility opportunities. Fiscal revenue and expenditure are included to account for size of the government sector in a province, which may be associated with the appeal of civil service as a career choice. FDI inflow is included to account for presence of foreign invested business in a province, which is the most popular career choice among respondents (see Table 5.7).

Table 5.8 reports the descriptive statistics on respondent characteristics.

NCSE & Career Preference

Figure 5.3 reports the coefficient estimates of *years of NCSE implementation* on respondents' preference for working for the government. The left panel plots the estimates for the dependent variable *government organization*, and the right panel plots the estimates for the dependent variable *civil servant*. In each panel, the regression used in the first column controls for current-year province-level characteristics, and the regression in the second column controls for province-level characteristics with a one-year lag.

Figure 5.3: Effects of NCSE on College Student Career Preference



Note: This figure reports the coefficient estimates with 95% confidence intervals for *years of NCSE implementation* on students' career preference regarding *government organization* and *civil servant*, respectively. Each panel reports two estimates using different model specifications; all regressions control for both respondent-level and provincial-level characteristics, with standard errors clustered at the level of student's home city. Full results are reported in Table 5.9.

As shown, for both outcomes, whether using current-year province-level characteristics or with a one-year lag, the coefficient estimates of *years of NCSE implementation* are consistently significant and positive. With each additional year of NCSE implementation in their

home province, college students' preference for working in government increases by roughly 10%. It suggests that, the more established NCSE is as an open merit-based recruitment system, the more attractive it becomes among college-educated youths, as they recognize that NCSE is a viable path to advance their socioeconomic wellbeing.

This finding demonstrate that NCSE is increasingly viewed as a viable channel of upward mobility as it becomes more institutionalized and more meritocratic. It attracts more college-educated youths to consider civil service as their preferred career choice, which contributes to their enhanced perception of upward mobility.

5. Concluding Remarks

In this chapter, I examine the impact of NCSE on college-educated youths in China, who constitute an increasingly large segment of the population. Applying a generalized difference-in-differences framework to a national survey dataset, I estimate the effect of NCSE introduction on those who happened to be eligible to take advantage of the open, merit-based recruitment system. I find that NCSE introduction significantly enhances eligible individuals' perception of their upward mobility, both in retrospect and in prospect; it also reduces their preference for redistribution, which means they are more contented with the status quo income distribution. Further, I explore the causal mechanism through which NCSE enhances eligible individuals' perception of upward mobility. I find that more robust NCSE implementation is associated with greater career preference for civil service, indicating that, as NCSE becomes more open, transparent, and merit-based, more people view it as a viable channel of upward mobility.

With the aid of the empirical tests, I demonstrate that NCSE has far-reaching implications beyond just the few who succeed in the exam and become regime insiders. By allowing all college-educated youths to apply and compete for government positions based on their talent and effort, NCSE in effect co-opts them with upward mobility opportunities. Without

making significant payouts, CCP is able to appease a large group, who are otherwise highly capable of opposition and revolt, and strengthen regime stability.

Appendix

Table 5.3: Balance of Respondent Characteristics

	eligible=0	eligible=1	unconditional		conditional	
	mean	mean	difference	p-value	difference	p-value
	(1)	(2)	(3)	(4)	(5)	(6)
A. full sample						
male	0.624	0.496	-0.127	0.000	-0.104	0.005
Han ethnic	0.926	0.934	0.007	0.445	0.010	0.516
urban	0.961	0.851	-0.110	0.000	-0.069	0.000
CCP member	0.445	0.221	-0.224	0.000	-0.188	0.000
civil servant	0.137	0.066	-0.071	0.000	-0.053	0.015
parent in CCP	0.380	0.313	-0.067	0.000	0.021	0.508
no. of observations	*856*	*3,739*				
B. cohort bandwidth=(-10, 10)						
male	0.626	0.513	-0.113	0.000	-0.094	0.011
Han ethnic	0.936	0.929	-0.007	0.550	0.006	0.712
urban	0.958	0.929	-0.030	0.010	-0.048	0.010
CCP member	0.413	0.326	-0.087	0.000	-0.170	0.000
civil servant	0.146	0.106	-0.040	0.010	-0.043	0.063
parent in CCP	0.383	0.395	0.012	0.622	0.010	0.782
no. of observations	*671*	*1,219*				
C. cohort bandwidth=(-5, 5)						
male	0.617	0.537	-0.079	0.012	-0.095	0.020
Han ethnic	0.940	0.924	-0.016	0.316	0.013	0.410
urban	0.956	0.932	-0.024	0.109	-0.043	0.054
CCP member	0.397	0.366	-0.032	0.307	-0.102	0.010
civil servant	0.150	0.116	-0.034	0.113	-0.024	0.359
parent in CCP	0.374	0.409	0.035	0.262	0.063	0.109
no. of observations	*433*	*577*				

Note: This table reports summary statistics of respondent characteristics by their NCSE eligibility at the time of introduction. Columns (1) and (2) report the means for the eligible group and the ineligible group, respectively; columns (3) and (4) report the *raw* differences in means and the p-value for a t-test of differences in means; columns (5) and (6) report differences in means *conditional* on cohort and province fixed effects.

Table 5.4: Placebo Test of Baseline Model

	mobility experience	mobility prospect		redistribution preference	
	(1)	(2)	(3)	(4)	(5)
A. NCSE Implemented 5 Years Earlier					
eligibility at introduction	0.088	0.112	0.112	0.204	0.204
	(0.136)	(0.178)	(0.178)	(0.130)	(0.130)
current eligibility			0		0
			(.)		(.)
observations	638	267	267	353	353
B. NCSE Implemented 5 Years Later					
eligibility at introduction	0.037	0.200**	0.110	0.055	0.073
	(0.094)	(0.096)	(0.105)	(0.095)	(0.101)
current eligibility			0.268**		-0.050
			(0.142)		(0.144)
observations	1274	1206	1206	745	745

Note: All regressions include a full set of province and cohort fixed effects (not reported), as well as survey year fixed effects (not reported). Robust standard errors are in parentheses, clustered at the province×cohort level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.5: Predicting the Timing of Province-Level NCSE Introduction

	Year of Introduction		Post NCSE	
	Cross Section		Panel	
	Measured in 1999		*Lagged by 1 Year*	
	OLS	Cox Model	OLS	Cox Model
	(1)	(2)	(3)	(4)
Province Characteristics				
GDP	-.191	1.18	0.310**	1.50*
	(.294)	(0.303)	(.147)	(0.333)
GDP per capita	-1.36**	2.45**	0.326***	2.77**
	(.670)	(1.03)	(0.116)	(1.11)
total fiscal revenue	-0.224	1.21	.164*	1.61**
	(.297)	(.328)	(0.085)	(0.369)
total fiscal expenditure	-0.054	1.12	0.233*	1.60
	(0.379)	(0.353)	(0.123)	(0.525)
employment rate	-0.036	1.02	0.243	9.36
	(.088)	(.039)	(0.493)	(30.1)

Note: This table reports regression results on whether province-level characteristics have any predictive power on the timing of NCSE introduction in each province. Regressions in columns (1) and (2) use cross-sectional data of province-level characteristics at the 1999 level, which was the first year any province introduced NCSE; regressions in columns (3) and (4) use panel data of province-level characteristics with a one-year lag. Robust standard errors are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.6: Robustness of Baseline Regressions

coefficient on *eligibility at introduction*	mobility experience (1)	mobility prospect (2)	(3)	redistribution preference (4)	(5)
A: Baseline					
full sample	0.287***	0.395***	0.295***	-0.195**	-0.186*
p-value	[0.001]	[0.000]	[0.003]	[0.042]	[0.055]
Wild bootstrap p-value	[0.010]	[0.002]	[0.032]	[0.027]	[0.044]
bandwidth=(-10, 10)	0.305***	0.362***	0.304***	-0.171*	-0.168
p-value	[0.001]	[0.000]	[0.002]	[0.091]	[0.104]
Wild bootstrap p-value	[0.010]	[0.002]	[0.020]	[0.078]	[0.088]
bandwidth=(-5, 5)	0.248**	0.244**	0.220*	-0.199*	-0.209*
p-value	[0.024]	[0.045]	[0.061]	[0.082]	[0.076]
Wild bootstrap p-value	[0.072]	[0.086]	[0.148]	[0.080]	[0.076]
B: With Province×Cohort-Level Controls					
full sample	0.281***	0.401***	0.301***	-0.208**	-0.196**
	(0.089)	(0.100)	(0.101)	(0.096)	(0.097)
bandwidth=(-10, 10)	0.321***	0.387***	0.330***	-0.173*	-0.173*
	(0.092)	(0.098)	(0.100)	(0.102)	(0.104)
bandwidth=(-5, 5)	0.272**	0.265**	0.240**	-0.209*	-0.219*
	(0.109)	(0.123)	(0.119)	(0.115)	(0.118)
C: With Individual-Level Controls					
full sample	0.320***	0.352***	0.270***	-0.166*	-0.160*
	(0.089)	(0.104)	(0.103)	(0.096)	(0.097)
bandwidth=(-10, 10)	0.350***	0.334***	0.284***	-0.151	-0.147
	(0.092)	(0.102)	(0.102)	(0.101)	(0.103)
bandwidth=(-5, 5)	0.284***	0.223*	0.201*	-0.172	-0.187
	(0.109)	(0.126)	(0.120)	(0.111)	(0.114)
D: Controlling for Provincial Economy×Cohort Fixed Effects					
full sample	0.242***	0.386***	0.283***	-0.217**	-0.206**
	(0.091)	(0.103)	(0.103)	(0.096)	(0.097)
bandwidth=(-10, 10)	0.282***	0.375***	0.316***	-0.198*	-0.200**
	(0.094)	(0.100)	(0.101)	(0.103)	(0.106)
bandwidth=(-5, 5)	0.227**	0.261**	0.235*	-0.220*	-0.239*
	(0.114)	(0.127)	(0.123)	(0.119)	(0.123)

Note: This table reports coefficient estimates on *eligibility at introduction*; standard errors shown in parentheses are clustered at the province×cohort level. All regressions include a full set of province and cohort fixed effects, as well as survey year fixed effects.

Panel A reports the coefficient values from baseline regressions with two rows of p-values shown in brackets, the first for standard errors clustered at the province×cohort level and the second for standard errors clustered at the province level, where wild bootstrap is implemented. Panel B controls for GDP, GDP per capita, total fiscal revenue, total fiscal expenditure, and employment rate at the province×cohort level. Panel C controls for respondent characteristics including gender, ethnicity, *hukou* status, CCP member, civil servant, and parent in CCP. Panel D includes an interaction between a province's GDP per capita in 1999 and a full set of cohort fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5.7: College Students' Career Preference

Question 1: What type of organization do you most want to work for after graduation?

	Frequency	Percent
Foreign Invested Enterprises	1,583	33.55
Large State-Owned Enterprises	711	15.07
CCP and Government Organizations	486	10.3
Research Institutes	421	8.92
Other State-Owned or Collective Enterprises	385	8.16
Schools	355	7.52
Start-Ups	314	6.65
Public Institutions	253	5.36
Private Enterprises	107	2.27
Others	93	1.97
Missing	11	0.23
Total	4,719	100

Question 2: What kind of job do you consider most desirable after graduation?

	Frequency	Percent
Corporate Manager	1,315	27.87
Researcher	736	15.6
Skilled Professional (Engineer, Doctor, Lawyer, etc.)	686	14.54
Civil Servant	604	12.8
Media, Culture, and Sports Professional	521	11.04
Teacher	293	6.21
Salesperson	168	3.56
Technician	151	3.2
Others	122	2.59
Clerk	116	2.46
Missing	7	0.15
Total	4,719	100

Table 5.8: BCPS Data: Respondent Characteristics

	N	Mean	S.D.	Min	Max
years of NCSE implementation	4,332	5.787	1.939	0	10
Career Preference					
government organization	4,718	0.103	0.304	0	1
civil servant	4,718	0.128	0.334	0	1
Respondent Characteristics					
male	4,718	0.526	0.499	0	1
Han ethnic	4,718	0.885	0.319	0	1
CCP membership	4,718	0.154	0.361	0	1
gaokao score	4,463	580.0	76.20	35	886
academic standing	4,718	5.259	2.462	0	9
extra-curricular hours	4,710	3.730	6.269	0	90
parent in government	4,718	0.184	0.388	0	1
size of home city	4,716	1.676	1.127	0	3

Table 5.9: NCSE and College Student Career Preference

	government organization		civil servant	
	current year	1-year lag	current year	1-year lag
	(1)	(2)	(3)	(4)
years of NCSE implementation	0.099**	0.093**	0.091**	0.090**
	(0.044)	(0.043)	(0.039)	(0.039)
Student Characteristics				
male	0.095	0.095	-0.181*	-0.180*
	(0.111)	(0.111)	(0.094)	(0.094)
Han ethnic	-0.540***	-0.540***	-0.387**	-0.388**
	(0.160)	(0.160)	(0.171)	(0.171)
CCP member	0.585***	0.587***	0.536***	0.534***
	(0.166)	(0.166)	(0.118)	(0.118)
gaokao score	-0.001	-0.0011	-0.002**	-0.002**
	(0.001)	(0.001)	(0.001)	(0.001)
academic standing	-0.047**	-0.047**	-0.071***	-0.071***
	(0.023)	(0.023)	(0.017)	(0.017)
extra-curricular hours	0.016**	0.016**	0.007	0.007
	(0.006)	(0.006)	(0.007)	(0.007)
parent in government	0.868***	0.868***	0.701***	0.699***
	(0.184)	(0.184)	(0.194)	(0.194)
size of home city	-0.204***	-0.204***	-0.207***	-0.207***
	(0.059)	(0.059)	(0.050)	(0.050)
Province Characteristics				
GDP	-1.944	-3.905	22.03	17.86
	(18.04)	(16.14)	(17.13)	(15.85)
GDP per capita	2.377	4.267	-21.49	-17.47
	(17.94)	(16.00)	(17.09)	(15.74)
fiscal revenue	-0.526	-0.522	-0.150	0.057
	(0.547)	(0.578)	(0.467)	(0.481)
fiscal expenditure	0.488	0.415	0.708	0.398
	(0.653)	(0.651)	(0.551)	(0.532)
FDI inflow	-0.018	0.015	-0.121	-0.131
	(0.115)	(0.121)	(0.111)	(0.124)
population	2.223	4.185	-22.12	-17.91
	(18.23)	(16.28)	(17.35)	(16.03)
employ rate	-0.670	-0.584	-0.143	-0.274
	(0.935)	(1.068)	(0.893)	(1.008)
constant	-25.11	-42.34	195.1	159.2
	(165.5)	(147.8)	(157.5)	(145.2)
observations	4102	4102	4102	4102

Note: This table reports logistic regression results using the 2009 BCPS data. All regressions include fixed effects for students' class cohort, academic major, and college type; standard errors clustered at the level of students' home city are shown in parentheses. Columns (1) and (3) include indicators of province characteristics of the current year, whereas columns (2) and (4) include province characteristics with a one-year lag.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Chapter 6

Institutionalized Meritocracy and Regime Legitimacy

As evidenced in Chapter 5, the inclusive nature and merit-based selection process of NCSE has fostered a perception of upward mobility among the citizens who are eligible to exam the exam. When given an opportunity to rise into the political elite class, albeit on a highly competitive basis, individuals demand less income redistribution from the government and are less discontented with their current socioeconomic status. The change in perception and attitude among college-educated youths, as brought about by NCSE, is crucial to long-term stability of the CCP regime.

The impact of NCSE, however, is even more far-reaching and goes beyond the group who stand to directly benefit from the upward mobility opportunity. By making the process open, transparent, and rule-based, NCSE brings a kind of procedural justice that is not often found in the political system. Although merit-based selection still favors those with privileges (since as they can take, or have taken, advantage of superior education resources and are hence better prepared for the exam), NCSE represents a rational system that is no longer arbitrary or surrounded by secrecy. For non-elites in China, now there is at least a road map that shows how an individual can rise into the political elite class. Thus, NCSE serves as an institutionalized channel that connects ordinary citizens to the elites and reduces

their sense of alienation in the regime.

In this chapter, I turn away from college-educated youths and look at the general public instead. I examine their support for NCSE and its sources. In addition, I explore the implications of NCSE support for regime legitimacy.

1. Support for Merit-Based Elite Recruitment

Data

To acquire a comprehensive understanding of the general public's attitude towards NCSE, I conducted a national representative survey in 2014 in collaboration with the Research Center on Contemporary China (RCCC) in Peking University. Using a multi-level stratified sample, the survey returned 4128 valid responses from both urban and rural areas in 25 provinces.

My main objective in the survey is to learn about whether, and how much, Chinese citizens support NCSE as well as the reasons behind their support. To achieve this goal, I designed a battery of questions specifically devoted to the topic of support for NCSE. The main question is phrased as follows,

> **Question**: The National Civil Service Exam has attracted a lot of attention in recent years. According to the *Civil Service Law*, individuals must take NCSE to enter the civil service. Do you support the institution of civil service exam?

Respondents were given choices on a scale of 1 to 5, indicating their level of support. Following the main question, respondents were asked to elaborate on their reasons for support,

> **Question**: Based on your personal experience and observation, how much does each of the descriptions below constitutes a reason for supporting NCSE? Please indicate your level of agreement with each statement, on a level of 1 to 5.

1. *NCSE improves the administrative efficiency of the government by raising the overall standard of civil service;*
2. *NCSE enhances the policymaking capacity of the government by strengthening technical expertise in the civil service;*
3. *NCSE provides a unobstructed channel of upward mobility for young talents, regardless of their family background;*
4. *NCSE reduces corruption in the government by improving the moral standard of the civil service.*

Table 6.1: NCSE Survey 2014: Respondent Support for NCSE

	N	Mean	S.D.	Min	Max
overall support	3,326	3.997	0.786	1	5
reason for support					
efficiency	3,394	4.017	0.837	1	5
policymaking	3,375	4.018	0.843	1	5
upward mobility	3,400	4.007	0.871	1	5
reduced corruption	3,382	3.907	0.943	1	5

As reported in Table 6.1, NCSE enjoys overwhelming support from the general public, with an average score of roughly 4 out of 5. The four statements on reason for support also receive similar level of support.

The survey also asked respondents whether they had personally taken NCSE and subsequently succeeded in placing themselves into the civil service. Since only a small proportion of the respondents were eligible (i.e., meeting both the age and education requirements), only 245 respondents in the sample reported that they had taken the exam before; among them, 83 were successful and subsequently became civil servants. Using these questions, I generated two dummy variables, "succeeded in NCSE" and "failed in NCSE", indicating different types of respondent experience with NCSE.

In addition, the survey also collected demographic information on respondents, including gender, age, education, city of residence, etc., as well as their family background such as father's political affiliation and father's occupation. Table 6.6 in the Appendix reports the summary statistics.

Analysis

In my analysis, I am mainly interested in two outcomes: an individual's overall support for NCSE and support for NCSE due to the upward mobility it provides. To understand what factors influence these outcomes, I use an ordinary least-square (OLS) regression to estimate the following model,

$$Y_i = \alpha + \beta\, Exam\ Experience_i + \Sigma\delta X_i + \epsilon_i \tag{6.1}$$

where Y_i represents respondent i's support for NCSE; $Exam\ Experience_i$ includes two variables indicating respondent i's experience with NCSE, i.e., "succeeded in NCSE" and "failed in NCSE"; X_i represents a set of individual-level characteristics of respondent i, including gender, age, ethnicity, education, CCP membership, type of residence (urban vs. rural), father's CCP membership, and father's occupation type.[1]

As discussed in Chapter 5, the introduction of NCSE was staggered across provinces. Consequently, respondents' awareness of and familiarity with NCSE would vary across provinces. Also, because the institutionalization of NCSE was a gradual process, the length of NCSE implementation in a province serves as a proxy for the degree of meritocracy in its elite recruitment. For these reasons, I expect respondents from provinces with a longer history of NCSE implementation to exhibit higher level of support. Therefore, I also estimate the following model with an OLS regression,

[1]Respondent's father's occupation is measured by a dummy variable, "father in working class," which takes value 1 when the respondent's father is/was a farmer or ordinary worker, and takes value 0 otherwise. This variable measures whether a respondent comes from a relatively disadvantaged background.

$$Y_{ip} = \alpha + \beta\, Exam\ Experience_i + \gamma\, NCSE_p + \Sigma\delta X_i + \epsilon_i \tag{6.2}$$

where Y_{ip} on the left of the equal sign represents the level of support for NCSE by respondent i from province p. On the right hand side, the model is largely the same as the one above, except that it includes an additional predictor, $NCSE_p$, which measures the number of years that NCSE has been implemented in province p.

The regression results for both models are reported in Table 6.2 and Table 6.3, respectively. In Table 6.2, we see that, not surprisingly, successful personal experience in NCSE boosts one's support for the recruitment system. However, interestingly, experience of failure in NCSE – when compared to not having taken it at all – does *not* make one less supportive of the system; and this is true for both overall level of support (columns 1-3) and support due to upward mobility (columns 4-6). This finding is important, since the vast majority of NCSE applicants do not succeed, and it is crucial for the CCP regime that they do not become disillusioned or cynical. One possible explanation for their consistent support is that the transparent selection process in NCSE leaves little room for them to blame the system. Although this is only a conjecture, if true, it speaks to the procedural justice that NCSE brings.

Table 6.2 also offers another insight, which is that both respondents from political elite family background (indicated by having a "father in CCP") and respondents from underprivileged family background (indicated by having a "father in working class") exhibit higher level of support for NCSE, both overall and for the reason of upward mobility. It suggests that public support for NCSE is not driven by one end of the socioeconomic spectrum. It is especially important to the regime that individuals from humble origins support NCSE and they believe that the upward mobility channel is working for them.

Table 6.2: Individual-Level Determinants for NCSE Support

	support: overall			support: upward mobility		
	(1)	(2)	(3)	(4)	(5)	(6)
succeeded in NCSE	0.381***		0.378***	0.378***		0.341***
	(0.096)		(0.088)	(0.090)		(0.089)
failed in NCSE	0.061		0.130*	0.034		0.093
	(0.080)		(0.077)	(0.082)		(0.079)
male		-0.083***	-0.081***		-0.066**	-0.066**
		(0.025)	(0.024)		(0.028)	(0.028)
age		0.005***	0.005***		0.005***	0.005***
		(0.001)	(0.001)		(0.001)	(0.001)
Han ethnic		0.069	0.064		0.043	0.038
		(0.073)	(0.073)		(0.081)	(0.082)
college		-0.004	-0.032		0.019	-0.004
		(0.045)	(0.044)		(0.043)	(0.042)
CCP		0.102***	0.065**		0.114***	0.081**
		(0.033)	(0.030)		(0.034)	(0.035)
urban		-0.003	-0.006		-0.020	-0.023
		(0.043)	(0.044)		(0.046)	(0.046)
father in CCP		0.111***	0.109**		0.179***	0.177***
		(0.041)	(0.041)		(0.044)	(0.045)
father in working class		0.078**	0.078**		0.086**	0.086**
		(0.032)	(0.032)		(0.033)	(0.033)
constant	3.985***	3.660***	3.662***	3.997***	3.660***	3.663***
	(0.038)	(0.095)	(0.096)	(0.033)	(0.101)	(0.101)
observations	3326	3326	3326	3400	3400	3400

Note: This table reports OLS regression results using the 2014 NCSE survey data. The dependent variable in columns (1)-(3) is respondents' overall level of support for NCSE; the dependent variable in columns (4)-(6) is respondents' level of support for NCSE for the upward mobility it provides. Standard errors are clustered at the city level for all regressions.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6.3: Effect of NCSE Implementation on NCSE Support

	support: overall			support: upward mobility		
	(1)	(2)	(3)	(4)	(5)	(6)
years of NCSE implementation	0.039*	0.039*	0.038*	0.030*	0.030*	0.029*
	(0.020)	(0.020)	(0.019)	(0.017)	(0.017)	(0.016)
succeeded in NCSE		0.331***	0.350***		0.333***	0.321***
		(0.087)	(0.084)		(0.085)	(0.090)
failed in NCSE		0.062	0.137		0.046	0.113
		(0.083)	(0.082)		(0.085)	(0.084)
male			-0.072***			-0.052*
			(0.026)			(0.027)
age			0.005***			0.005***
			(0.001)			(0.001)
Han ethnic			0.076			0.046
			(0.080)			(0.087)
college			-0.047			-0.020
			(0.047)			(0.042)
CCP			0.056*			0.069*
			(0.032)			(0.036)
urban			-0.018			-0.033
			(0.044)			(0.046)
father in CCP			0.106**			0.178***
			(0.044)			(0.048)
father in working class			0.068*			0.075**
			(0.034)			(0.036)
constant	3.593***	3.586***	3.297***	3.695***	3.689***	3.393***
	(0.211)	(0.210)	(0.227)	(0.180)	(0.180)	(0.203)
observations	3101	3101	3101	3172	3172	3172

Note: This table reports OLS regression results using the 2014 NCSE survey data. The independent variable "years of NCSE implementation" is at the province level, the other variables are at the individual level. The dependent variable in columns (1)-(3) is respondents' overall level of support for NCSE; the dependent variable in columns (4)-(6) is respondents' level of support for NCSE for the upward mobility it provides. Standard errors are clustered at the city level for all regressions.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Results in Table 6.3 show that the individual-level determinants for NCSE support continue to be robust when we add in the higher-level variable. As expected, respondents' support for NCSE increases with "years of NCSE implementation," indicating that as the merit-based elite recruitment system continues to mature and becomes more institutionalized, it enjoys more and more public support. One reason for the growing support is the popular belief that NCSE provides upward mobility for youths regardless of their family background (columns 4-6), and this belief seems to be enforced over time.

I replicate the two regression models with the other three reasons for NCSE support, namely efficiency, policymaking, and anti-corruption (see Table 6.7 and Table 6.8 in the Appendix). While the coefficient estimates for "succeeded in NCSE" and "years of NCSE implementation" continue to be significant and positive, the effects of "father in working class" disappear. Taken all results together, we can infer that the upward mobility provided by NCSE is particularly important in generating support among those from underprivileged background.

2. NCSE: A Source of Regime Legitimacy

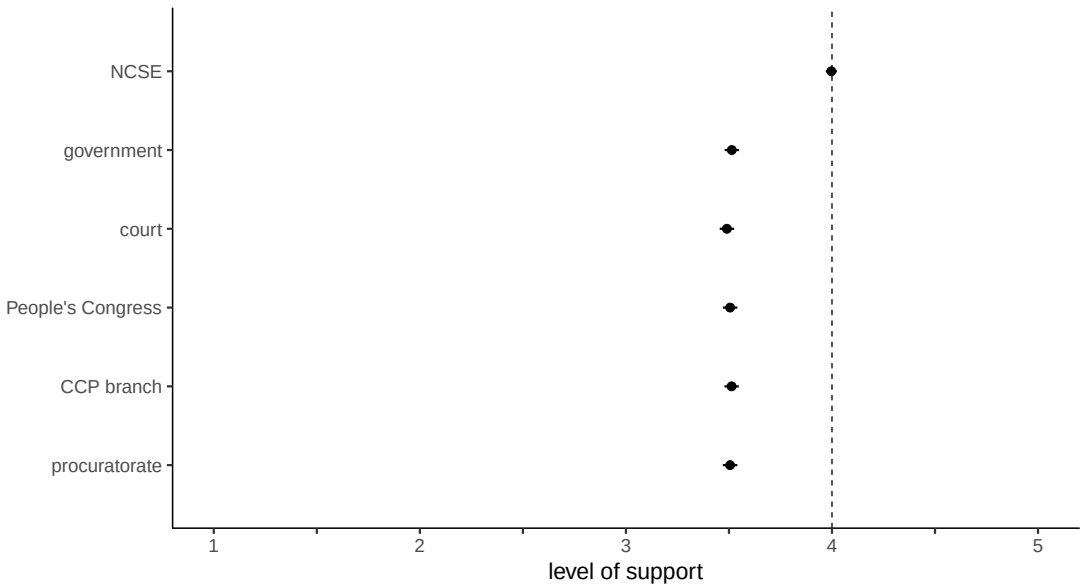
When considered in isolation, public support for NCSE can seem trivial, since its meritocratic nature almost automatically invokes approval. However, as an increasingly well-known political institution that serves as a bridge connecting ordinary citizens and the political elite and that many citizens can take part in, NCSE has important implications for the legitimacy of the CCP regime.

Due to the centralized rule by CCP and the absence of elections, most Chinese citizens seldom have a chance to participate in politics or even come into contact with the government in a regular, institutional setting. As NCSE continues to draw millions of applicants every year, it becomes a rare window through which ordinary citizens catch a glimpse of how their local governments function and even interact with government officials. If the

recruitment process is transparent, open, and just, it demonstrates to the public that the CCP government is fair-minded and credible when dealing with ordinary citizens. This, in turn, contributes to the legitimacy of its rule.

The survey I conducted in 2014 provides some corroborating evidence. In addition to questions on support for NCSE, it also included a series of questions on respondents' support for other political institutions. Specifically, it asked respondents to rate their level of support, on a scale of 1 to 5, for the local government, local court, local People's Congress, local CCP branch, and local procuratorate. Figure 6.1 below shows the average support for NCSE and that for local political institutions. Since most Chinese citizens experience and observe NCSE at the local level, the comparison between NCSE and other local political institutions is warranted.

Figure 6.1: Public Support for Local Political Institutions



Note: This plot reports the average level of public support for various political institutions at the prefectural level (i.e., cities and municipalities). Horizontal bars represent 95% confidence intervals.

As illustrated in Figure 6.1, Not only does NCSE enjoy high level of public support (i.e., 4.00 out of 5), its support level is significantly higher than all other local political institutions,

including the government and the CCP. This is noteworthy, as respondents often suffer from pressure of social desirability when asked about support for government and CCP and tend to inflate their answers, which means the gap between support for NCSE and that for local government and CCP could be even larger in reality. For the ruling party that depends heavily on performance legitimacy, NCSE has become a important source of that legitimacy, especially when other political institutions do not perform nearly as well in the eyes of the public.

To further investigate whether, and how, NCSE contributes to the legitimacy of the CCP, I look at several opinion questions in the survey concerning respondents' attitude towards the regime. Two questions asked respondents how satisfied they were with the government at the central and local level, respectively, on a scale of 0 to 10; another question asked if respondents agreed, on a scale of 1 to 4, with the statement that, "People should support our current political system despite the various problems it has." Table 6.4 reports the summary statistics of the responses to these questions.

Table 6.4: NCSE Survey 2014: Respondent Attitude on Political Legitimacy

	N	Mean	S.D.	Min	Max
satisfaction with central government	3,998	7.581	2.007	0	10
satisfaction with local government	3,919	6.511	2.364	0	10
support for current political system	3,611	2.780	0.724	1	4

Next, I examine whether political support for the regime varies with NCSE. Once again, I use the province-level variable, "years of NCSE implementation," as a proxy for the degree of meritocracy and institutionalization in elite recruitment, and run a simple OLS model with it as the main predictor. Since it is beyond individual respondents' control as how many years NCSE has been implemented in their province, the coefficient estimates, if statistically significantly, can be interpreted as having a causal effect.

Table 6.5: Effect of NCSE Implementation on Political Legitimacy

	satisfaction with government				political system	
	central level		local level			
	(1)	(2)	(3)	(4)	(5)	(6)
years of NCSE implementation	0.030	0.019	0.179**	0.168**	0.028**	0.026**
	(0.053)	(0.050)	(0.083)	(0.080)	(0.013)	(0.012)
succeeded in NCSE		0.038		0.372		-0.022
		(0.253)		(0.331)		(0.102)
failed in NCSE		-0.169		-0.294		-0.023
		(0.184)		(0.238)		(0.072)
male		-0.164**		-0.205**		-0.021
		(0.070)		(0.083)		(0.029)
age		0.024***		0.019***		0.008***
		(0.002)		(0.004)		(0.001)
Han ethnic		-0.257		-0.344		-0.062
		(0.242)		(0.278)		(0.074)
college		0.027		0.271*		-0.008
		(0.098)		(0.148)		(0.045)
CCP		0.113		0.055		0.002
		(0.109)		(0.127)		(0.041)
urban		0.156*		-0.014		0.030
		(0.086)		(0.150)		(0.038)
father in CCP		0.182*		-0.097		0.053
		(0.101)		(0.129)		(0.039)
father in working class		0.267***		0.105		0.075**
		(0.096)		(0.158)		(0.036)
constant	7.284***	6.255***	4.610***	4.137***	2.486***	2.153***
	(0.539)	(0.522)	(0.835)	(0.706)	(0.130)	(0.151)
observations	3614	3614	3539	3539	3259	3259

Note: This table reports OLS regression results using the 2014 NCSE survey data. The independent variable "years of NCSE implementation" is at the province level, the other variables are at the individual level. The dependent variable in columns (1)-(2) is respondents' satisfaction with the performance of central government; the dependent variable in columns (3)-(4) is respondents' satisfaction with the performance of their local government; and the dependent variable in columns (5)-(6) is respondents' degree of agreement with the statement that "People should support our current political system despite its various problems." Standard errors are clustered at the city level for all regressions.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

For each outcome of interest, I estimate two model specifications, one with individual-level covariates and the other one without. The results are reported in Table 6.5, and they are consistent across different model specifications. For satisfaction with central government (columns 1-2), the coefficient estimates on NCSE implementation are not statistically significant, indicating that NCSE does not affect how respondents view the central government. In contrast, the coefficient estimates on NCSE implementation for satisfaction with local government (columns 3-4) are positive and statistically significant, which suggest that, as NCSE implementation deepens, respondents come to view their local governments more favorably. The non-effect on satisfaction with central government and the positive effect on local government are illuminating. Because NCSE is implemented locally, the general public tends to give local government credit as the selection process becomes more transparent and fair. Moreover, NCSE implementation also has a positive effect on respondents' support for the current political system, *despite the various problems it has* (columns 5-6). This finding echoes the attitude I frequently encountered during interviews on the topic of NCSE, which is that, although the system is not perfect and there is significant corruption inside the government, at least now it gives ordinary citizens an opportunity to join the government and potentially benefit from the system. In other words, NCSE makes non-elites more tolerant of the problems the regime has. Alternatively, the positive effect of NCSE on support for the current political system can be interpreted in conjunction with its positive effect on local governments. Since Chinese citizens are likely to accord legitimacy to the regime based on its performance, as they become more satisfied with their local governments (as a result of NCSE implementation), their view on the political system would also improve.

3. Concluding Remarks

In this chapter, I examine public support for NCSE and its implications for the legitimacy of the regime. Using data from a national representative survey, I find that, while successful experience with NCSE increases its support, failed experience does not diminish it. Implementation of NCSE, therefore, can only lead to a net gain of public support without the risk of embittering failed applicants, who constitute the majority of people participating in the exam. This would encourage the central government to continue promoting the exam and its meritocratic nature. I also find that NCSE enjoys an increasing level of support as it has been around for longer; it shows that, as the public learns more about NCSE , it grows to like it more, quite possibly because of the open and transparent selection process.

Moreover, I also explore the effect of NCSE implementation on political legitimacy. I find that NCSE serves as an important source of legitimacy for the regime; in particular, it enhances public perception of local government and makes ordinary citizens more tolerant of the existing political system.

One important implication of these findings is that, as NCSE becomes a source of legitimacy that the CCP regime relies upon, it becomes harder for the regime to abolish the merit-based elite recruitment system. In other words, although there is no hard constraint on the CCP that prevents it from taking away merit-based elite recruitment at its will, the political legitimacy NCSE helps to generate acts as a powerful incentive for the ruling party to keep it. In other words, the fear of losing legitimacy serves as a commitment device. As long as college-educated youths believe that NCSE is here to stay, their perception of upward mobility will be enhanced and their demand for income distribution weakened. This, in turn, contributes to regime stability.

Appendix

Table 6.6: NCSE Survey 2014: Summary Statistics

	N	Mean	S.D.	Min	Max
years of NCSE implementation	3,728	10.363	1.840	5	15
Individual Experience with NCSE					
succeeded in NCSE	4,128	0.020	0.140	0	1
failed in NCSE	4,128	0.039	0.195	0	1
Respondent Characteristics					
male	4,128	0.474	0.499	0	1
age	4,128	46.4	17.0	18	80
Han ethnic	4,128	0.965	0.185	0	1
college	4,128	0.278	0.448	0	1
CCP membership	4,128	0.160	0.366	0	1
urban	4,128	0.744	0.437	0	1
father in CCP	4,128	0.152	0.359	0	1
father in working class	4,128	0.651	0.477	0	1

Table 6.7: Individual-Level Determinants for NCSE Support: Additional Dimensions

	support: efficiency			support: policymaking			support: anti-corruption		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
succeeded in NCSE	0.385***		0.403***	0.394***		0.383***	0.404***		0.411***
	(0.101)		(0.095)	(0.098)		(0.090)	(0.115)		(0.114)
failed in NCSE	0.110		0.173**	0.063		0.129	0.029		0.105
	(0.080)		(0.079)	(0.093)		(0.090)	(0.095)		(0.094)
male		-0.086***	-0.084***		-0.071***	-0.070***		-0.107***	-0.107***
		(0.027)	(0.027)		(0.025)	(0.025)		(0.036)	(0.036)
age		0.004***	0.005***		0.005***	0.005***		0.006***	0.006***
		(0.002)	(0.002)		(0.001)	(0.001)		(0.002)	(0.001)
Han ethnic		0.066	0.060		0.070	0.064		0.076	0.070
		(0.078)	(0.078)		(0.085)	(0.086)		(0.077)	(0.077)
college		0.002	-0.030		-0.005	-0.033		-0.007	-0.035
		(0.053)	(0.053)		(0.052)	(0.051)		(0.052)	(0.052)
CCP		0.067	0.027		0.117***	0.080**		0.104**	0.065*
		(0.042)	(0.037)		(0.038)	(0.034)		(0.039)	(0.037)
urban		0.035	0.031		0.004	0.001		-0.016	-0.019
		(0.044)	(0.045)		(0.043)	(0.044)		(0.060)	(0.061)
father in CCP		0.059	0.057		0.076	0.073		0.104**	0.101**
		(0.041)	(0.041)		(0.045)	(0.046)		(0.050)	(0.050)
father in working class		0.055	0.055		0.069*	0.070*		0.067	0.067*
		(0.033)	(0.033)		(0.036)	(0.036)		(0.040)	(0.040)
constant	4.002***	3.710***	3.710***	4.006***	3.691***	3.693***	3.896***	3.571***	3.574***
	(0.042)	(0.108)	(0.110)	(0.041)	(0.107)	(0.107)	(0.046)	(0.099)	(0.099)
observations	3394	3394	3394	3375	3375	3375	3382	3382	3382

Note: This table reports OLS regression results using the 2014 NCSE survey data. The dependent variable in columns (1)-(3) is support for NCSE due to improved administrative efficiency; the dependent variable in columns (4)-(6) is support for NCSE due to enhanced policymaking; and the dependent variable in columns (7)-(9) is support for NCSE due to reduced corruption. Standard errors are clustered at the city level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6.8: Effect of NCSE Implementation on NCSE Support: Additional Dimensions

	support: efficiency			support: policymaking			support: anti-corruption		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
years of NCSE implementation	0.039*	0.039*	0.038*	0.038*	0.037*	0.037*	0.060**	0.060**	0.059**
	(0.021)	(0.021)	(0.020)	(0.022)	(0.021)	(0.021)	(0.023)	(0.023)	(0.022)
succeeded in NCSE		0.345***	0.392***		0.341***	0.357***		0.344***	0.362***
		(0.098)	(0.097)		(0.088)	(0.086)		(0.101)	(0.100)
failed in NCSE		0.112	0.188**		0.046	0.121		0.037	0.112
		(0.085)	(0.084)		(0.097)	(0.096)		(0.097)	(0.097)
male			-0.076**			-0.062**			-0.099**
			(0.029)			(0.026)			(0.038)
age			0.004**			0.004***			0.005***
			(0.002)			(0.001)			(0.002)
Han ethnic			0.066			0.069			0.096
			(0.084)			(0.093)			(0.088)
college			-0.057			-0.055			-0.039
			(0.055)			(0.053)			(0.057)
CCP			0.016			0.067*			0.066*
			(0.040)			(0.036)			(0.038)
urban			0.014			-0.009			-0.038
			(0.047)			(0.046)			(0.058)
father in CCP			0.059			0.071			0.089*
			(0.045			(0.049)			(0.050)
father in working class			0.050			0.064			0.055
			(0.035)			(0.038)			(0.042)
constant	3.611***	3.601***	3.347***	3.623***	3.616***	3.343***	3.291***	3.285***	2.992***
	(0.225)	(0.224)	(0.244)	(0.226)	(0.225)	(0.243)	(0.248)	(0.248)	(0.249)
observations	3160	3160	3160	3145	3145	3145	3153	3153	3153

Note: This table reports OLS regression results using the 2014 NCSE survey data. The dependent variable in columns (1)-(3) is support for NCSE due to improved administrative efficiency; the dependent variable in columns (4)-(6) is support for NCSE due to enhanced policymaking; and the dependent variable in columns (7)-(9) is support for NCSE due to reduced corruption. Standard errors are clustered at the city level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Chapter 7

Conclusion

My dissertation is motivated by a fundamental question that, *why does merit-based elite recruitment exist in an authoritarian regime*? When left to their own inclinations, authoritarian elites prefer to recruit and promote individuals based on patronage ties, as doing so helps them extend their power sphere and also reduces potential threat coming from capable outsiders. Why, then, would a regime like the CCP adopt a recruitment system that runs counter to elite preference?

The central argument I make is that, by instituting a merit-based system for elite recruitment, an authoritarian regime allows ordinary citizens to enter the elite class on the basis of their talent and effort. In essence, merit-based elite recruitment provides a channel for non-elites to move up the socioeconomic ladder *within the existing political framework*, as oppose to pursuing other options (e.g., revolts and etc.) that threaten the stability or survival of the regime. Even though the number of opportunities to move up are limited, when a regime is committed to merit-based elite recruitment, it forges a belief that the channel to enter the ruling elite class is open to all, regardless of background and status; in turn, it creates a widespread and persistent perception of upward mobility among its ordinary citizens, which makes them more optimistic about their future prospect and more tolerant of their current

socioeconomic conditions.

Focusing on the Chinese case, in which the CCP introduced the National Civil Service Examination (NCSE) about two decades ago, I empirically test my argument that institutionalized meritocracy generates perception of upward mobility, which helps to stabilize the regime. To do so, I focus on two main areas, namely the dynamic between the central government and local elites in the enforcement of meritocracy in NCSE, and the dynamic between ordinary citizens and the ruling class as a result of NCSE introduction.

On the topic of enforcing meritocracy, I first examine incumbent elites' preference during recruitment (Chapter 3). I find that, as expected, local elites are motivated by private interests to prefer candidates with patronage ties. This preference often interferes with the meritocratic recruitment criteria set by the central government in NCSE. Next, I explore how the central government addresses the problem of divergent elite preference (Chapter 4). I find that, by imposing enforceable rules and constraints on local elites, their patronage behavior during recruitment can be reigned in. As NCSE becomes more institutionalized (i.e., with laws governing its implementation and a devoted government agency enforcing these laws), elites learn to do away with patronage practice, which makes NCSE an increasingly level playing field for all applicants, regardless their patronage ties.

Having shown that, through institutionalization, the regime can credibly demonstrate its commitment to NCSE as a system of merit-based elite recruitment, I then explore what impacts it has on ordinary Chinese citizens. In Chapter 5, I show that the introduction of NCSE has made more college-educated youths consider civil service as a viable career choice, as they are now able to compete based on merit and do not have to worry about their patronage ties or the lack thereof. The belief that NCSE is a open and viable channel to enter the elite class, in turn, makes college-educated youths in China more optimistic about their upward mobility in the regime and, correspondingly, less demanding on the government for income redistribution. Taken together, these findings indicate that institutionalized meritoc-

racy can serve as an instrument of co-optation that makes millions of capable young people buy into the existing political arrangement and seek socioeconomic betterment via a channel provided by the regime.

Last but not least, I examine the implications of NCSE on the legitimacy of the regime (Chapter 6). I find that, although only a small portion of the population is eligible to participate in the exam, NCSE receives overwhelming public support. Citizens are especially fond of the idea that, as a open and transparent platform, NCSE provides an opportunity of upward mobility for all young talents, regardless of their status or background. Compared to other political institutions, NCSE is viewed much more favorably by the public and it has become a source of legitimacy for the CCP regime.

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